METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF JANUARY, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

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METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

JANUARY, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	39·079	On the 27th, at 9 a.m.
	Lowest Reading	29·295	On the 17th, at 2 a.m.
	Mean Height	29·786	

(Being 0·012 in. greater than that in the same month on an average of the preceding 15 years.)

WIND	Greatest Pressure... ...	12·5 lbs.	On the 14th.
	Mean Pressure	0·8 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	S.	

(Prevailing direction during the same month for the preceding 15 years N.E.)

TEMPERATURE	Highest in the Shade ...	84·1	... On the 5th.
	Lowest in the Shade ...	60·9	... On the 24th.
	Greatest Range	16·7	... On the 3rd.
	Highest in the Sun ...	120·0	... On the 13th.
	Highest in Black Box with Glass Top	215·0	... On the 30th.
	Lowest on the Grass ...	51·5	... On the 19th.
	Mean Diurnal Range ...	10·6	
	Mean in the Shade ...	71·6	

(Being 0·6 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 20th.
	Least	52·0	... On the 15th and 16th.
	Mean	78·0	

(Being 5·5 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Greatest Fall	1·607 inch.	On the 26th.
	Number of Days	20 rain and 4 dew.	
	Total Fall	2·480 inches.	65 feet above ground.
		3·862 inches.	15 inches above ground.

(Being 0·392 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	5·344 inches.
OZONE	Mean Amount	5·7

(Being 1·4 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ..	Number of Days Lightning	3
CLOUDY SKY ..	Mean Amount	7·5
	Number of Clear Days ...	3
METEORS ..	Number Observed ...	0

REMARKS.

The weather was remarkably hot during the early part of the month, but the mean temperature is only 0·6 greater than the average for this month, owing to the wet and cloudy weather which prevailed here and generally over the Colony during the latter part. The rain fall was specially heavy to the north, and produced great floods. At Bourke, on the 24th, the streets were one sheet of water.

On 27th, at Maitland, the flood was 33 ft. 9 in. above its ordinary level; all the lower part of the town was flooded, and a great many persons were houseless. On the 27th the Peel River was flooded, and all low lands submerged for miles. The water was higher than any flood since 1864. At same date there was a flood and great destruction of property at Muswellbrook. On the 23rd an aurora was seen at Lambton. On 21st a very heavy south-east gale blew on the north-east coast and did much damage.

SYDNEY, JANUARY, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9, 3, & 9.
1		30·245	E.N.E.	214	72·8	65·4	76·9	62·6	14·3	69·8	114·6	54·2	71·2	64·3	0·001	0·3
2	G. N. Dec.	·179	E.N.E.	270	74·2	67·7	78·6	62·9	15·7	70·8	115·0	52·6	71·1	68·7	·0	0·0
3	Full Moon	·124	N.E.	330	76·6	70·9	81·0	64·3	16·7	72·6	117·0	54·0	71·3	72·3	0·001	0·0
4		·018	N.E.	378	76·3	71·6	79·6	69·6	10·0	74·6	116·1	65·6	71·4	76·0	·0	4·0
5		29·861	S.	358	77·0	71·2	84·1	68·2	15·9	76·2	116·8	61·1	71·1	72·3	·0	6·0
6		·916	S.	167	73·7	69·8	80·6	69·1	11·5	74·9	114·1	64·4	71·6	79·7	0·030	9·7
7		·893	E.N.E.	200	76·2	72·6	81·6	69·7	11·9	75·7	117·3	62·2	71·4	81·7	0·036	5·0
8		·927	S.	388	69·6	67·5	76·0	71·2	4·8	73·6	94·7	63·7	71·3	88·0	0·001	10·0
9	Apogee.	30·045	E.	93	70·4	67·8	74·8	65·0	9·8	69·9	86·9	62·8	71·6	85·7	0·120	10·0
10	In Equat.	29·985	E.	300	71·2	68·8	75·7	68·0	7·7	71·9	95·0	59·9	71·2	86·7	0·140	10·0
11	Last Qr.	30·109	E.	.....	72·3	65·0	77·1	68·8	8·3	73·0	117·2	61·5	71·1	64·0	0·415	10·0
12		·049	N.E.	322	72·9	68·3	77·8	65·1	12·7	71·5	112·0	56·6	71·5	76·0	0·050	9·0
13		29·876	S.	345	75·9	72·0	81·0	67·6	13·4	74·3	120·0	60·6	71·0	81·0	·0	10·0
14		·971	S.S.E.	405	67·5	65·0	73·4	67·5	5·9	70·5	108·0	64·9	71·2	85·3	0·258	10·0
15		30·065	E.	156	71·2	64·8	76·0	66·0	10·0	71·0	114·9	59·2	70·9	68·3	0·065	4·0
16		29·907	N.E.	348	73·1	64·6	77·7	64·3	13·4	71·0	114·0	55·8	70·6	60·0	·0	0·0
17	G. S. Dec.	·760	N.E.	537	77·0	66·8	81·1	65·3	15·8	73·2	115·4	56·4	70·5	67·7	·0	6·7
18	New Moon	·830	S.E.	212	68·2	62·4	72·5	68·1	4·4	70·3	89·7	63·5	70·7	69·0	0·116	10·0
19		30·087	E.S.E.	177	70·2	64·6	76·1	62·2	13·9	69·2	108·0	51·5	71·1	72·0	0·001	10·0
20		·075	N.E.	199	71·5	69·9	76·4	64·6	11·8	70·5	106·0	62·6	70·9	90·7	0·457	8·7
21	Perigee	29·962	N.E.	261	75·5	72·4	80·6	67·6	13·0	74·1	119·0	59·4	70·7	83·7	0·011	9·0
22		·912	S.	333	73·0	70·8	76·0	68·2	7·8	72·1	101·0	...	70·2	88·3	0·001	10·0
23	In Equat.	30·005	S.	287	66·0	63·3	69·8	66·6	3·2	68·2	77·0	64·9	70·5	84·0	0·058	8·3
24		·022	S.E.	77	68·7	65·9	73·6	60·9	12·7	67·3	90·9	57·3	70·4	83·7	0·027	10·0
25	First Qr.	29·806	S.	341	67·6	67·2	70·1	67·3	2·8	68·7	77·2	65·9	70·2	97·0	0·352	10·0
26		·882	S.	460	66·5	62·9	71·1	65·8	5·3	68·5	101·0	61·6	70·0	80·0	1·607	10·0
27		30·260	S.S.E.	316	69·8	62·4	73·9	64·2	9·7	69·1	109·9	59·0	70·2	63·3	·0	9·7
28		·166	S.S.E.	264	71·7	65·3	76·2	65·1	11·1	70·7	103·9	60·5	70·5	67·7	0·012	9·7
29		·014	S.	315	68·2	67·7	74·1	65·6	8·5	69·9	93·8	64·0	70·1	96·7	0·076	10·0
30	G. N. Dec.	29·945	N.E.	127	73·4	70·3	79·8	67·1	12·7	73·5	119·0	65·0	70·2	83·7	0·024	3·7
31		·902	S.	467	70·6	67·4	79·3	66·1	13·2	72·7	114·7	58·0	70·7	81·7	0·003	10·0
Means	.....	29·993	S.	8647	71·9	67·5	76·9	66·3	10·6	71·6	106·5	60·3	70·9	78·0	Sum. 3·862	7·5

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·000 above the true mean for the day. Dew 1st, 3rd, 8th, and 31st.

SYDNEY, JANUARY, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·298	5·0	5·5	5·3	1.—Fine. Atmosphere clear; very dry and warm. Fresh cool breeze in the evening, and no clouds.
2	0·277	6·0	5·0	5·5	2.—Fine. No clouds during day, very warm. Atmosphere very dry. Light dew fell in the evening.
3	0·276	6·0	7·0	6·5	3.—Fine. No clouds until 8·15 p.m. Cloudy at 9·45 p.m. Very dry and warm during day with fresh breeze. Hazy to W. at 9 p.m. and dew falling.
4	0·280	...	...	3·3	4.—Fine, very dry and warm. Scattered clouds all morning, and sunshine. After 9·30 a.m. clouds cleared.
5	0·280	5·5	7·0	6·3	5.—Fine until after 1 p.m., very hot. Like thunderstorm W. all afternoon. Storm began 5·50 p.m. and ceased about 8·45 p.m. Electrometer 90 during storm, lightning from 5·58 p.m. Dropping rain 6·37 p.m. until 7·15 p.m., when it began a little heavier.
6	0·172	6·0	7·5	6·8	6.—Cloudy and dull, also very warm. Clouds light at mid-day, and sunshine at intervals. Dropping rain 6·56 p.m., then light steady rain until 8·30 p.m. A single clap of thunder 7·52 p.m. with lightning. Lightning N. 9·12 p.m.
7	0·197	6·0	6·5	6·3	7.—Fine from after 1 p.m. until about 4·30 p.m., and very warm. Light thunderstorm W. from 3·8 p.m. until after 5 p.m. Fine again after 7 p.m. Dew falling in the evening.
8	0·102	7·0	6·5	6·8	8.—Clouds unbroken during day, and strong S. breeze. Raining lightly all afternoon and evening from 1·43 p m.
9	0·082	6·5	1·5	4·0	9.—Light rain from 3·40 a.m. until 4·45 a.m., and light shower at 8·35 a m. Fine after 5 p.m. until about 6·30 p.m., and again from 7·45 p.m. until about 8·10 p.m. Calm at 9 p.m.
10	0·091	7·0	6·5	6·8	10.—Morning calm. Cloudy, very dull, and showery during day. Clouds unbroken.
11	0·266	...	...	4·0	11.—Morning dull. Scattered clouds during day. Evening cloudy and fine alternately from 8·30 p.m.
12	0·194	5·5	8·0	6·8	12.—Shower after midnight, cloudy until 9·50 p.m., partial clearing at 11 a.m., strong cool breeze.
13	0·204	3·5	7·5	5·5	13.—Very light clouds all morning. Fine between 10 a.m. and noon. Thunderstorm with lightning and heavy shower from 3·50 p.m. until about 5·30 p.m., from W. round by S. Electrometer 90 at 4·10 p.m.
14	0·063	4·0	8·0	6·0	14.—Cloudy. Stormy, and raining lightly from 8·55 a.m. until after 3 p.m. Evening very dull. Clouds clearing S. at 10 p.m. and clouded up again.
15	0·246	5·0	7·5	6·3	15.—Cloudy, with partial clearing at intervals until about 2 45 p.m., when it became fine. No clouds at 9 p m.
16	0·320	3·0	6·0	4·5	16.—Fine. Very dry fresh breeze all day. No clouds in the evening.
17	0·290	3·5	9·0	6·3	17.—Cloudy and fine alternately. Very strong dry wind. Dropping rain 9·43 p.m. Shower at 11·25 p.m.
18	0·115	...	...	2·5	18.—Cloudy and very dull like rain all day. Clouds unbroken. Strong cool breeze. Very light showers between 5·29 p.m. and 6·15 p.m.
19	0·087	5·5	8·0	6·8	19.—Clouds broken in the forenoon, afternoon and evening dull. Very light rain 3·58 p.m., and dropping rain 6·35 p.m., followed by a very light shower. Calm at 9 p.m.
20	0·105	7·0	8·5	7·8	20.—Cloudy; clouds broken. Light rain all morning until 11 a m. Fresh breeze in mid-day.
21	0·153	5·0	7·0	6·0	21.—Fine at 9·45 a.m. until after 10 a.m. Dull like thunderstorm at 3 p.m. Evening dull.
22	0·106	6·0	10·0	8·0	22.—Cloudy and very dull, with light rain at intervals. Light steady rain from 4 50 p.m. until about 8 30 p.m. Thunder S.W. at 4 p.m., and 4·5 p.m., then ceased.
23	0·073	8·0	8·0	8·0	23.—Cloudy and very dull. Showery from 9·12 a.m. until 10 a.m. Rained again from 2·35 p.m. until 3·30 p.m. Clouds breaking at 7 p.m., fine at 8 30 p.m. until 9·10 p.m.
24	0·060	6·0	6·5	6·3	24.—Cloudy and very dull like rain, also calm. Light drops of rain at 1·4 p.m., and light thick rain 2 p.m. until 2·15 p.m.
25	...	...	...	4·0	25.—Cloudy. Steady rain all day from 6 a m.
26	0·172	6·5	5·5	6·0	26.—Cloudy. Light rain nearly all morning. Light shower 6 50 p.m., afterwards dropping rain at intervals until 7·45 p.m. Strong breeze until evening. Evening dull.
27	0·218	4·0	6·5	5·3	27.—Cloudy. Partial clearing of clouds at intervals, fresh breeze. Shower at 11·3 p.m.
28	0·130	4·0	7·0	5·5	28.—Cloudy. Clouds much broken until about noon when it became dull. Afternoon and evening dull like rain.
29	0·076	6·0	1·5	3·8	29.—Cloudy. Raining all morning until after 11 a.m., and from 1·30 p.m. until about 4·30 p.m., and again lightly for awhile after 6·30 p.m. Clouds broken to S. and near zenith at 9 p.m.
30	0·168	4·0	4·0	4·0	30.—Light shower at 9·3 a.m. Clouds broken all morning and began to clear at 12·30 p.m. Fine about 1·30 p.m. Heavy dew falling at 9 p.m. Warm during day.
31	0·243	6·0	6·0	6·0	31.—Cloudy. Turned dull in the afternoon like rain. Began to rain at 6·5 p.m. and continued to rain lightly during the remainder of the evening. Strong cool breeze during day.
Sum.					
Means	5·344	5·5	6·6	5·7	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.	
1	30·008	30·070	9 a.m.	29·951	4 p.m.	...	...	...	...	...	...	...	2	7	1	4	8	2	...	...	...	214	8·9	0·4	1·8	N.E.	7·26 p.m.
2	29·941	30·013	9 a.m.	29·909	5 & 6 p.m. & 3 a.m.	...	...	...	...	...	...	...	...	2	9	5	8	...	...	...	...	270	11·3	0·6	3·1	N.E.	5· 0 p.m.
3	29·866	29·957	9 a.m.	29·834	3 a.m.	...	...	...	...	...	...	...	...	2	7	12	3	...	...	...	...	330	13·8	0·9	3·4	N.E.	5·35 p.m.
4	29·724	29·854	9 a.m.	29·712	1 a.m.	...	...	...	...	...	...	...	1	...	3	15	5	...	...	...	...	378	15·8	1·3	4·5	N.E.	5·55 & 6·12 p.m.
5	29·684	29·768	7 a.m.	29·568	3 p.m.	5	2	...	1	1	...	...	...	...	...	4	4	1	...	3	3	358	14·9	1·1	4·5	N.E.	3·58 p.m.
6	29·732	29·790	8 p.m.	29·685	2 a.m.	6	2	...	...	...	...	...	...	1	1	1	5	2	...	1	3	167	7·0	0·3	1·4	S.	6·30 p.m.
7	29·687	29·734	9 a.m.	29·644	5 p.m.	5	2	...	...	...	...	...	...	...	...	3	8	3	...	...	3	200	8·3	0·4	1·3	N.E.	8·26 p.m.
8	29·815	29·874	11 & 12 p.m.	29·754	10 a.m.	17	3	2	...	...	...	...	...	...	...	...	...	...	...	...	2	388	16·2	1·3	7·2	S.	2· 0 p.m.
9	29·782	29·873	9 a.m.	29·753	4 & 6 p.m.	5	3	...	...	...	...	...	...	...	...	...	...	11	...	1	4	93	3·9	0·1	0·5	S.S.W.	10·27 a.m.
10	29·847	29·908	8 a.m.	29·794	3 p.m.	...	...	1	...	...	...	...	...	...	...	...	8	10	4	...	1	300	12·5	0·8	4·2	E.N.E.	4·10 p.m.
11	29·893	29·931	9 a.m.	29·902	11 p.m.	...	...	...	...	...	...	...	...	7	3	...	2	12	...	...	...	...	...	...	.....	.....
12	29·771	29·877	9 a.m.	29·707	8 a.m.	...	...	...	...	...	...	...	...	4	6	10	4	...	...	...	...	322	13·4	0·9	4·5	N.E.	4·17 p.m.
13	29·656	29·754	8 a.m.	29·579	3 p.m.	7	1	...	1	5	...	...	1	...	...	4	4	...	...	...	1	345	14·4	1·0	6·5	S.	7·30 a.m.
14	29·852	29·888	8 a.m.	29·796	9 a.m.	7	5	...	...	...	...	...	...	...	...	...	...	...	...	...	12	405	16·9	1·4	12·5	S.S.W.	10·12 a.m.
15	29·783	29·890	9 a.m.	29·812	2 p.m.	...	...	...	...	...	...	...	3	6	...	...	4	7	...	3	1	156	6·5	0·2	0·7	S.S.E.	10·18 a.m.
16	29·652	29·736	9 a.m.	29·605	10 a.m.	...	...	...	...	...	...	...	...	1	4	11	8	...	...	...	...	348	14·5	1·1	3·9	N.E.	12·40 p.m.
17	29·421	29·624	8 a.m.	29·295	2 a.m.	3	...	...	...	...	...	1	1	2	...	12	3	...	...	...	2	537	22·4	2·5	11·0	N.E.	5·15 p.m.
18	29·820	29·912	8 a.m.	29·656	9 a.m.	3	1	1	1	...	...	...	...	...	...	...	...	...	2	10	6	212	8·8	0·4	2·2	S.S.E.	10·28 a.m.
19	29·915	29·949	10 p.m.	29·886	4 a.m.	1	...	...	...	1	1	1	...	...	3	1	2	2	8	3	1	177	7·4	0·3	1·8	E.S.E.	2·17 p.m.
20	29·824	29·902	9 a.m.	29·781	5 a.m.	...	...	...	...	...	...	...	...	...	2	18	3	1	...	...	...	199	8·3	0·4	1·8	N.E.	3·35 p.m.
21	29·732	29·790	9 a.m.	29·702	4 a.m.	5	1	...	...	...	...	...	...	...	1	9	8	...	...	...	...	261	10·9	0·6	2·2	S.	5·15 & 6·23 a.m.
22	29·682	29·784	8 a.m.	29·639	5 p.m.	9	3	1	...	...	...	...	...	...	1	2	7	1	...	...	...	333	13·9	1·0	8·4	S.	3· 5 a.m.
23	29·685	29·922	9 p.m.	29·824	11 a.m.	17	...	...	...	6	1	...	...	...	...	...	...	...	...	...	...	287	12·0	0·7	3·1	S.	11·30 a.m.
24	29·730	29·846	9 a.m.	29·629	5 p.m.	5	...	...	...	...	1	...	...	...	...	...	3	...	5	8	2	77	3·0	0·0	1·8	E.N.E.	8·40 a.m.
25	29·554	29·670	8 a.m.	29·450	3 p.m.	4	4	3	3	...	...	...	...	...	...	...	1	4	2	1	2	341	14·2	1·0	3·6	S.S.W.	7·15 a.m.
26	29·900	30·074	8 a.m.	29·705	9 a.m.	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	460	19·2	1·8	11·0	S.	12·20 p.m.
27	30·003	30·079	9 a.m.	29·973	4 a.m.	1	...	...	...	...	...	...	...	...	...	...	...	...	...	5	18	316	13·2	0·9	1·3	S.E.	3· 0 p.m.
28	29·895	29·990	9 a.m.	29·809	4 & 5 a.m.	5	1	...	...	...	...	...	...	...	...	...	...	...	...	3	15	264	11·0	0·6	1·4	S.	8·55 a.m.
29	29·778	29·842	9 a.m.	29·737	3 & 5 a.m.	22	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	315	13·1	0·9	3·6	S.	1·20 p.m.
30	29·713	29·795	7 a.m.	29·670	3 a.m.	2	1	...	...	1	...	...	...	1	...	8	2	6	2	1	...	127	5·3	0·1	0·6	E.	6·45 p.m.
31	29·840	29·953	8 a.m.	29·724	9 a.m.	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	467	19·5	1·9	7·6	S.	1·17 p.m.
Sums or Means.	29·786	January 27th. 30·079	9 a.m.	January, 17th,. 29·295	2 a.m.	169	31	8	6	14	3	2	8	33	41	119	100	62	23	39	84	Sum 8647	Mean. 12·0	Mean. 0·8			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of JANUARY, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., January, 1874.									For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force 0-6	Clouds 0-10.	Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	29·959	87·1	41·0	S.	...	...	96·2	77·9	108 9	68·0	6·110	9	1·400	24	9·381
Tenterfield ...	80	...	...	...	..	S.E.	1·7	7·0	76·4	...	85·1	...	5·900	15	1·850	26	...
Grafton	22	...	...	84·5	...	S.E.	0·2	5·7	96·6	72·3	104·7	66·4	5·280	13	2·040	24	3·856
Bourke	393	...	...	86·5	...	S.E.	0·2	5·0	...	75·0	106·7	67·1	12·240	8	7·320	25	...
Narrabri	196	...	...	80·7	...	S.W.	1·4	2·8	92·2	69·1	103·9	61·5	8·270	9	2·400	25	6·352
Armidale.....	80	3278	...	70·0	95·0	S.E.	1·6	6·9	78·8	61·1	89·2	52·4	2·100	8	0·600	25	4·140
Goonoo Goonoo	110	1550	...	75·8	62·0	S.	0·1	3·8	84·9	66·7	94·5	59·4	9·720	5	6·200	25	...
Port Macquarie	0	53	29·982	73·7	...	S.W.	1·6	6·9	79·7	67·6	84·5	63·1	8·905	19	2·140	25	8·827
Murrurundi ...	94	1545	...	72·0	...	S.E.	0·2	4·8	82·1	61·8	96·1	51·1	7·595	7	1·800	24	...
Cassilis	120	...	...	74·3	...	S.E.	0·4	1·3	84·3	64·3	102·1	56·2	8·840	11	5·060	25	3·971
Scone	78	...	...	69·2	...	S.	0·9	5·1	76·1	62·2	92·6	50·2	11·090	9	...	...	...
Muswellbrook..	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	71·7	...	E.	0·8	...	87·8	55·6	98·9	46·9	Rain guage & Evap. out of order.				
Mudgee	121	1500	...	74·6	...	E.S.E.	0·6	...	85·3	63·9	99·4	55·0	7·820	8	3·590	26	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	7·390	12	3·810	25	...
West Maitland	18	...	...	72·4	...	S.	0·8	6·6	81·9	62·8	95·5	59·1	6·750	11	3·720	26	5·628
Lambton	7	...	...	69·3	...	E.	1·3	...	77·5	61·1	92·3	54·0	8·200	15	2·100	26	3·477
Newcastle	1	112	29·950	71·8	76·0	N.E.	0·3	5·6	77·3	66·3	83·8	62·3	6·940	13	1·640	26	...
Orange.....	124	2891	...	71·9	...	E.	1·2	4·6	83·2	60·6	94·0	51·8	4·950	9	1·800	18	3·397
Bathurst	96	2200	29·935	73·5	69·0	S.E.	0·9	5·3	89·8	57·2	103·5	44·3	3·050	7	0·980	26	...
Forbes	176	...	30·094	77·7	...	S.E.	0·5	3·4	89·4	65·9	101·2	51·1	...	...	...	...	...
Kurrajong	36	1870	...	62·5	...	E.S.E.	2·2	6·6	68·1	56·8	86·0	51·1	5·040	18	0·700	19	...
Mount Victoria	61	3490	29·923	63·9	69·0	S.E.	0·0	7·6	74·4	53·4	97·9	47·9	8·530	15	1·800	23	4·457
Woodford	50	2192	29·892	66·5	...	S.E.	0·6	...	71·3	61·6	87·7	55·2	7·720	24	1·500	26	...
Parramatta.....	16	...	...	...	...	S.E.	0·8	6·9	...	65·1	...	58·1	1·870	2	1·380	25	...
South Reef	0	...	...	...	...	S.E.	1·5	7·0	...	...	...	...	4·740	16	1·230	26	...
Sydney.....	5	155	29·993	71·6	78·0	S.	0·8	7·5	76·9	66·3	84·1	60·9	3·862	20	1·607	26	5·344
Liverpool.....	16	...	30·008	70·9	...	S.	0·8	8 8	79·3	62·5	92·0	57·0	3·162	20	1·130	26	...
Wentworth.....	476	...	...	91·2	....	S.W.	1·7	3·2	91.2	66·9	119·0	53·5	1·760	5	0·870	17	12·064
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	2·240	10	0·850	25	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	4·290	15	1·280	26	...
Young	140	...	...	74·8	...	N.E.	1·1	2·0	89·9	59·6	102·0	51·1	1·600	4	1·330	18	10·920
Wollongong ...	0	...	...	71·3	...	N.E.	1·6	...	78·1	64·4	86·4	50·7	1·300	4	0·600	26	...
Moss Vale	31	...	...	67·3	...	S.	1·1	...	76·7	57·9	95·7	49·8	3·010	9	1·150	23	...
Goulburn.....	54	2129	30·037	73·5	70·0	E.	0·0	6·3	90·2	56·7	102·6	45·0	0·400	4	0·190	26	5·060
Terara	4	...	...	...	...	N.E.	1·9	6·4	...	...	...	...	1·730	8	0·630	11	...
Wagga Wagga	161	...	...	78·5	...	S.E.	0·8	...	88·6	68·4	106·1	55·9	3·440	2	2·720	18	11·080
Cape St. George	0	175	29·961	71·8	79·0	N.E.	2·0	6·8	78·6	64·9	87·2	60·6	1·940	14	0·320	26	...
Queanbeyan ...	60	...	...	70·4	...	E.	0·4	6·7	79·1	61·7	94·2	48·1	0·250	2	0·200	7	6·616
Urana	218	...	...	80·8	...	N.N.W.	0·5	1·9	93·7	67·8	114·5	52·1	2·590	4	1·330	18	12·497
Deniliquin	287	410	29·979	75·9	53·0	N.E.	1·4	1·5	96·5	55·3	115·3	47·2	1·710	5	0·580	17	...
Kiandra	88	4640	...	57·9	70·0	N.W.	2·1	4·0	78·9	36·8	96·2	26·3	5·120	9	3·650	18	...
Cooma	52	2637	...	68·9	..	N.	2·2	6·4	84·6	53·2	103·6	39·2	1·700	4	1·100	19	4·807
Albury.....	175	572	30·003	75·3	63·0	N.E.	0·5	2·1	93·4	57·2	111·4	48 3	4 890	8	1·850	19	...
Eden.....	0	107	30·003	68·8	70·0	N.E.	1·4	6·8	75·7	61·9	81·0	54·1	2·920	13	1·670	18	...

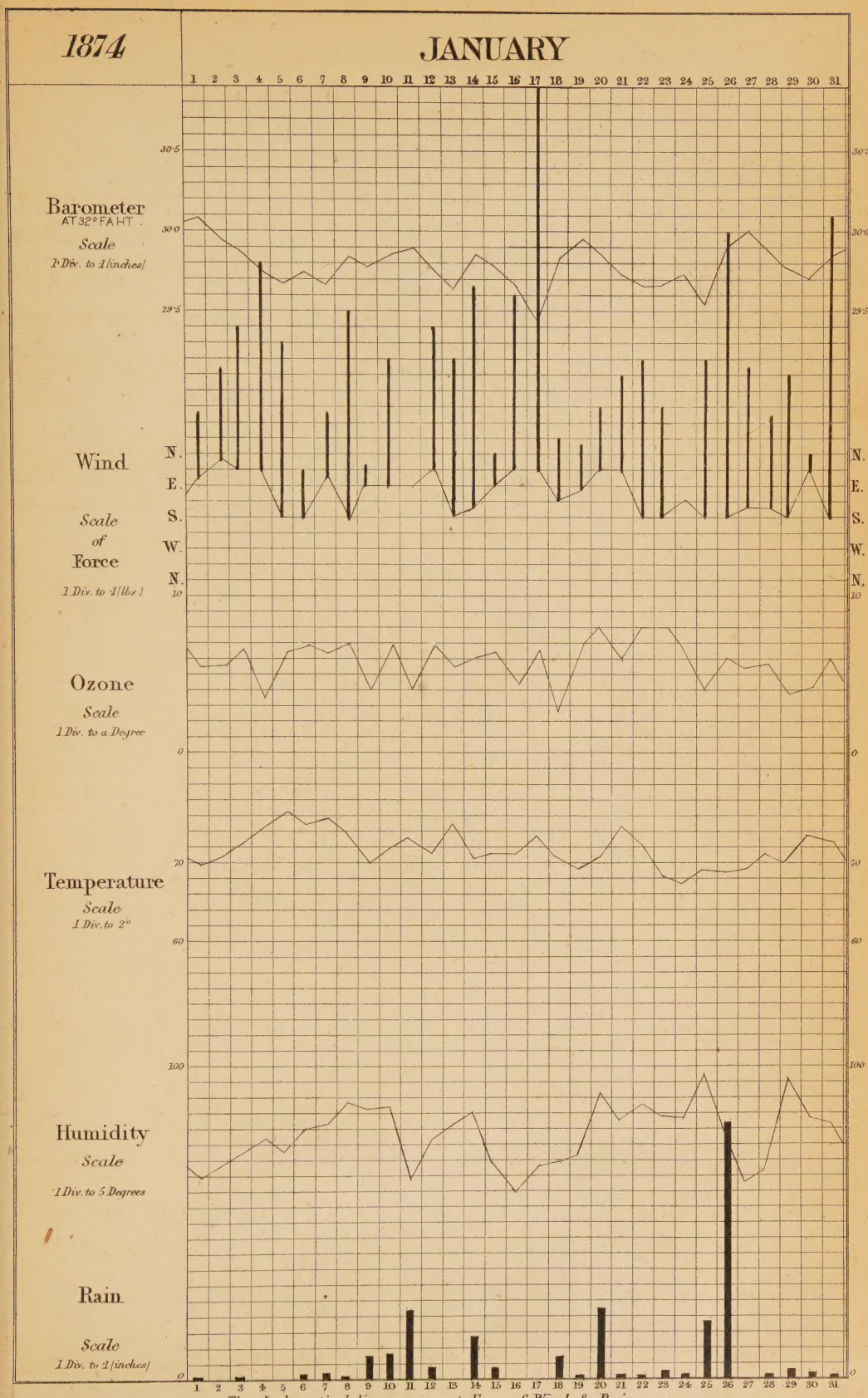
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Thunderstorms, 6th, 12th, 17th, and 20th; gales, 7th, 17th; hot winds frequent; and river running high end of month.
Bourke—Thunderstorms, 8th, 13th, 14th, 16th and 17th; and heavy rain, 24th and 25th.
Narrabri—Heavy storm, 6th; and heavy floods, 27th to 30th.
Armidale—Unsettled weather, 22nd.
Goonoo Goonoo—25th and 26th, highest flood since 1864, one creek higher than ever known.
Port Macquarie—Thunderstorms, 13th and 25th.
Murrurundi—Thunderstorms, 7th, and 13th; and very hot early part of month.
Cassilis—Thunderstorms, 14th, 15th; violent wind storm, 18th; and river flooded, 25th.
Scone—Violent thunderstorm, 14th; highest flood known, 25th and 26th.
Dubbo—Thunderstorm, 7th; sultry, 20th and 22nd; lunar rainbow, 25th.
Mudgee—Thunderstorm, 6th.
Dalwood—River flooded, 25th.
West Maitland—River flooded from 25th to end of month, 33 ft. 9 in. high, 27th, covering lower half of town.
Lambton—Aurora, 23rd; and lightning during month.
Newcastle—Stormy, 23rd; Hunter River flooded, 27th.
Orange—Thunderstorms, 5th, 6th, 7th, 9th, and 13th.
Bathurst—Thunderstorms, 7th and 9th; and heavy lightning. 13th.
Kurrajong—Thunderstorms, 5th, 6th, 7th, 13th, and 15th.
Mt. Victoria—Thunderstorms, 6th, 7th, 13th, and 22nd; and foggy during month.
Woodford—Thunderstorms, 5th, 6th, 7th, and 8th.
Parramatta—Thunderstorms, 9th and 13th.
South Reef—Thunderstorms, 5th and 13th.
Sydney—Thunderstorms, 5th, 6th, 7th and 13th; and stormy, 14th, 21st, and 22nd.
Liverpool—Thunderstorms, 5th, 13th, and 22nd.
Wentworth—Hot wind, 3rd and 4th; thunderstorm, 13th; and hot early part of month.
Wilton—Thunderstorms, 5th, 6th, and 13th.
Cordeaux River—Thunderstorms, 6th, 7th, 13th, 22nd, and 29th.
Young—Thunderstorm, 10th.
Moss Vale—Thunderstorms, 7th and 13th; heavy shower, 22nd.
Goulburn—Thunderstorm, 13th.
Terara—Thunderstorm, 13th; squall, 10th; and S. gale, 17th.
Cape St. George—N.E. gale, 2nd; S. burster, 5th; S.E. squall, 17th; and heavy sea, 18th.
Queanbeyan—Thunderstorms, 3rd and 6th; very hot, 3rd and 5th; and foggy, 20th.
Urana—Strong winds, 11th.
Deniliquin—Very hot, 1st, 2nd, 3rd, and 16th.
Kiandra—Thunderstorm, 6th; and heavy fog, 26th.
Cooma—Very hot, 2nd; and thunderstorms, 5th and 6th.
Albury—Thunderstorms, 5th and 10th; and close and muggy, 21st.
Eden—Thunderstorms, 3rd, 6th, and 13th; and strong winds, 17th, 25th, and 26th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Force of Wind on 17th 2.5lbs Dew 1st 3rd 8th & 31st

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF FEBRUARY, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price* 6*d.*] 3*u* 12—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

FEBRUARY, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·109	On the 26th, at 10 p.m.
	Lowest Reading	29·522	On the 5th, at 3 p.m.
	Mean Height	29·761	

(Being 0·041 in. less than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure... ...	25·2 lbs.	On the 22nd.
	Mean Pressure	1·2 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	S.	

(Prevailing direction during the same month for the preceding 15 years S.)

TEMPERATURE	Highest in the Shade ...	94·5	... On the 5th.
	Lowest in the Shade ...	57·8	... On the 27th and 28th.
	Greatest Range	23·7	... On the 5th.
	Highest in the Sun ...	129·6	... On the 5th.
	Highest in Black Box with Glass Top	213·0	... On the 5th.
	Lowest on the Grass ...	53·4	... On the 28th.
	Mean Diurnal Range ...	11·5	
	Mean in the Shade ...	70·2	

(Being 0·5 less than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 10th, 17th, and 23rd.
	Least	40·0	... On the 5th.
	Mean	79·5	

(Being 5·1 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	21 rain and 2 dew.	
	Greatest Fall	3·990 inches.	On the 23rd.
	Total Fall	7·951 inches.	65 feet above ground.
		10·487 inches.	15 inches above ground.

(Being 3·823 inches greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	4·654 inches.
OZONE	Mean Amount	5·9

(Being 1·8 greater than that in the same month on an average of the preceding 15 years.)

ELECTRICITY ..	Number of Days Lightning	12
CLOUDY SKY ..	Mean Amount	7·3
	Number of Clear Days ...	2
METEORS ..	Number Observed ...	0

REMARKS.

The weather during the month, was very wet and cloudy, and the mean temperature 0·5 less than the average. From the 4th to the 8th inclusive, the weather was hot and seasonable, but during the rest of the month rain fell nearly every day, and was very heavy over a considerable portion of the Colony from 20th to end of month. Floods occurred at Liverpool, on 22nd, Maitland, 24th, and at Scone and Muswellbrook, on 28th, on the 12th, the highest known flood occurred in Cordeaux River.

Thunder storms were very frequent and severe during the month.

SYDNEY, FEBRUARY, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		Taken at 9, 3, & 9.
1	Full Moon	30·147	S.	158	65·5	59·5	72·1	64·4	7·7	68·3	103·0	60·8	70·6	68·0	0·016	10·0
2		29·988	N.E.	342	72·4	67·5	76·1	60·0	16·1	68·1	114·7	51·0	70·1	74·7	·0	5·3
3		30·000	S.	108	69·2	64·9	75·4	65·7	9·7	70·6	108·6	61·5	70·2	77·3	0·240	6·7
4		29·964	N.E.	369	75·8	71·0	84·4	62·1	22·3	73·3	115·8	57·6	70·1	76·0	0·003	0·3
5		·770	S.	299	83·2	72·9	94·5	70·8	23·7	82·7	129·6	65·9	70·0	59·7	·0	9·0
6	In Equat. / Apogee.	·915	E.	275	77·8	73·7	82·4	68·6	13·8	75·5	117·5	63·9	70·7	78·7	·0	5·3
7		·865	N.E.	238	75·5	71·4	87·1	70·0	17·1	78·6	121·4	66·0	70·5	79·3	0·051	9·3
8		·791	S.S.W.	437	79·7	73·4	86·2	70·8	15·4	78·5	123·6	66·0	70·3	70·0	0·001	0·0
9		·959	S.	263	66·4	64·3	69·1	67·2	1·9	68·2	73·3	66·4	70·1	87·0	0·146	10·0
10	Last Qr.	30·054	W.	132	66·1	66·0	72·5	62·7	9·8	67·6	93·1	65·3	70·4	99·3	0·025	10·0
11		29·960	W.N.W.	200	70·0	69·2	78·6	63·7	14·9	71·2	113·6	63·0	70·0	95·0	0·166	10·0
12		·979	E.	181	70·1	68·2	76·4	66·0	10·4	71·2	116·0	63·7	70·6	89·3	0·364	9·7
13	G. S. Dec.	·993	E.	216	73·4	70·2	79·2	67·4	11·8	73·3	117·8	61·3	69·9	82·3	0·252	6·3
14		30·002	N.E.	172	73·3	70·0	78·1	69·0	9·1	73·6	117·6	...	69·4	82·3	1·054	10·0
15		29·933	N.E.	254	77·6	73·2	81·6	68·1	13·5	74·9	119·6	65·6	70·7	77·0	·0	9·0
16		·842	W.	297	70·9	68·7	76·1	70·8	5·3	73·5	87·0	68·5	71·1	88·0	0·001	10·0
17	New Moon	·914	W.S.W.	168	67·1	66·5	72·5	62·2	10·3	67·4	94·6	62·4	71·3	96·3	0·795	10·0
18	Perigee	·834	W.	449	65·2	58·8	71·8	60·8	11·0	66·3	111·6	58·4	71·6	66·3	0·980	4·0
19	In Equat.	·853	S.S.W.	477	66·9	60·1	73·1	58·8	14·3	66·0	110·6	53·9	71·4	64·3	0·057	3·0
20		·950	S.S.W.	502	67·2	60·4	71·6	59·2	12·4	65·4	108·6	55·0	71·1	65·0	·0	6·3
21		·983	S.S.W.	630	66·1	60·5	71·4	61·4	10·0	66·4	107·3	58·4	71·3	69·7	0·001	10·0
22		·799	S.S.W.	611	66·0	65·7	71·4	61·9	9·5	66·7	100·6	59·4	71·1	98·0	0·204	10·0
23	First Qr.	·933	S.S.W.	570	67·0	66·6	63·4	66·1	2·3	67·3	74·3	65·4	71·3	97·3	3·990	10·0
24		·972	S.S.W.	524	68·5	66·5	71·1	65·8	5·3	68·5	80·9	65·0	69·7	87·7	0·485	10·0
25		30·085	S.	475	64·8	60·1	66·9	64·5	2·4	65·7	78·9	61·9	69·1	74·7	0·712	10·0
26	G. N. Dec.	·261	W.	272	65·1	61·6	68·6	61·3	7·3	65·0	99·1	57·4	70·7	80·0	0·410	9·7
27		·256	N.E.	205	67·2	62·5	72·7	57·8	14·9	65·3	111·2	57·1	69·5	75·0	0·533	0·7
28		·052	N.N.E.	479	72·0	65·7	77·2	57·8	19·4	67·5	116·1	53·4	68·7	68·7	0·001	0·0
Means	.....	29·966	S.	9303	70·4	66·4	75·9	64·5	11·5	70·2	105·9	61·3	70·4	79·5	Sum. 10·487	7·3

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·043 above the true mean for the day. Dew fell, 4th, 8th.

SYDNEY, FEBRUARY, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
					1.—Cloudy and dull all day, clouds broken after 9 p.m.
1	0·076	...	...	3·0	2.—Fine and warm until 3·30 p.m. Electrical clouds S.W. & S. at 3 p.m. Thunderstorm all evening from 6·43 p.m. until after 11·30 p.m. Lightning vividly all round during storm. Light rain during the evening from 7·34 p.m. Fresh breeze during day.
2	0·252	5·5	8·0	6·8	
3	0·075	3·0	4·0	3·5	3.—Cloudy and dull until about 4 p.m Evening hazy and heavy dew falling.
4	0·252	3·0	5·0	4·0	4.—Clouds formed about 4 p.m., and cleared again at 4·45 p.m. Fresh dry breeze during day; very warm.
5	0·338	2·5	8·0	5·3	5.—Cloudy, clouds light. Hot wind until 5·15 p.m. Thunderstorm N. 6 54 p m. Lightning N.W. at 4·44 p.m., and during evening from N.W. round by N. to S.E. Several storms about during evening. Fine at 10·30 p.m.
6	0·261	3·0	5·5	4·3	6.—Morning cloudy. Fine from 11 a.m. until towards evening. Thunderstorm N.W. 6·50 p.m., another storm E. after 8·30 p m., and increasing in violence, passed over the city and ended at 10·45 p m Lighting vividly all round during storm; also, raining lightly. Electrometer 90 during storm.
7	0·165	3·0	6·0	4·5	7.—Cloudy until about 5 p.m.; about 6 p.m. it turned cloudy again. Like thunderstorm all afternoon. Lightning W.N W to S W. from 7·42 p m. Morning calm.
8	0·282	...	...	3·5	8.—Fine until after 11 a.m. Tunderstorm N N.W. with lightning 1·50 p.m. Heavy shower at 2·28 p.m. Another thunderstorm S.S.E. at 8 35 p.m. Dropping rain at 8·59 p m. Lightning all round during evening.
9	0 055	7·5	7·5	7·5	9.—Cloudy and dull, light rain from 10·45 a.m. and un il after 3 p.m., and at intervals during afternoon and evening. Strong breeze.
10	0·000	6·0	7·0	6·5	10.—Clouds unbroken during day; also raining, except for short intervals. Very heavy rain at 7·7 p.m. Lightning all evening from 7·30 p.m., N.W., N., N.E., E., SE. & S.
11	0·088	6·0	7·0	6·5	11.—Cloudy and dull, very warm in forenoon. Thunderstorm from W. at 1·31 p.m. until about 4·30 p.m. Rained from 1·54 p.m. until 4 40 p m.; and a short time in the evening. Lightning W. at 1·58 p.m., & S.E. at 10 7 p.m.
12	0·116	6·5	6·5	6·5	12.—Light rain all morning until after 8 a.m. and again from 9·6 a.m until 9 53 a.m. Sprinkling rain at 4·27 p.m, and squally and showery during evening, with lightning from 7·22 p.m. Fine from about 1·30 p.m. until 1·45 p.m.; also, between 10 p.m. and 11 p.m.
13	0·216	6·0	8·0	7·0	
14	0·138	8·0	4·0	6·0	
15	0·241	...	...	3·3	
16	0·114	9·0	9·0	9·0	13.—Cloudy and fine alternately, began to rain at 9·10 p.m.
17	0·006	8·5	8·5	8·5	14.—Cloudy and dull. Very heavy rain from 1·.0 a.m. until 3 a.m., and light showers at 9·17 a.m., 9·50 a.m., and 10 a m. Dropping rain at 2·51 p.m. Lightning S.W. at 8 30 p.m.
18	0·285	6·0	5·5	5·8	15.—Light clouds all morning, cleared at 12 30 p m. Thunderstorm W. to S. from 3·29 p.m. until about 6·15 p.m. Lightning all evening from 5 31 p.m. S. & W, and along coast after 8 40 p.m. Dropping rain 5 58 p.m. until about 6·15 p.m.
19	0·318	5·0	6·0	5·5	
20	0·331	4·5	5·0	4·8	16.—Cloudy and very dull. Light rain at intervals during day.
21	0·246	5·0	9·0	7·0	17.—Cloudy. Raining all forenoon at intervals until after 1 p.m. Thunderstorm W. with heavy rain from 5·51 p m. until about 6 p.m. Lightning S.W. during evening. Fine from 7·45 p.m. until 8·50 p.m. Very heavy shower at 10·40 p m.
22	...	...	...	3·3	18.—Fine until 2 p.m, and again after 7 p.m. Thunderstorm W. from 4·29 p.m. until about 4·45 p.m. and rained from 4 20 p m until 5·20 p.m. Lightning S. at 4·42 p.m. and N. during evening. Strong dry breeze during day.
23	...	6·5	7·0	6·8	19.—Cloudy and fine alternately until 6·30 p.m. Evening fine with no clouds. Strong dry breeze during day; atmosphere clear.
24	0·168	5·0	8·5	6·8	20.—Cloudy and fine alternately with strong dry breeze.
25	0·098	9·0	6·0	7·5	21.—Cloudy dull, partial clearing of clouds at intervals during forencon. Drops of rain 4·20 p.m. and 9 7 p.m. Rained at 6 10 p m. Very strong dry breeze.
26	0·133	8·0	9·0	8·5	22.—Cloudy. Strong gale blowing. Raining all forenoon. Heavy showers all afternoon and evening until about about 10·30 p m.
27	0·123	6·0	7·0	6·5	23.—Cloudy. Showery from 2 a.m. until daylight, then light steady rain during day with S. gale. Very heavy rain at intervals during forenoon.
28	0·277	5·5	8·0	6·8	24.—Cloudy and dull. Light rain at intervals during afternoon and evening from 3 43 p.m. Strong breeze.
					25.—Cloudy and dull Heavy rain all morning until after 9 a m. Forenoon showery; also a few light showers during afternoon and evening. Strong breeze all day.
					26.—Cloudy and showery. Evening cold.
					27.—Fine. Dry fresh breeze. Showery from midnight until 4 a.m. Cloudy from noon until after 1 p.m, and again for awhile after 10 p.m. Lunar halo at 10·20 p.m.
					28.—Fine. Warm. Atmosphere very dry. Clouds rose up from S. and became cloudy at 10·45 p.m. Lightning S. at 9·10 p.m.
	Sum.				
Means	4·654	5·8	6·9	5·9	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, FEBRUARY, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·916	29·973	9 a.m.	29·839	6 a.m.	10	1	2	4	2	1	...	...	...	...	...	...	...	...	...	4	158	6·6	0·2	1·3	S.	10·30 a.m.
2	29·662	29·818	9 a.m.	29·586	5 p.m.	5	4	...	...	...	...	...	1	1	1	10	...	...	...	1	1	342	14·3	1·0	3·6	N.N.E.	5·40 p.m.
3	29·812	29·837	9 p.m.	29·783	2 p.m.	6	3	1	6	...	...	...	...	...	...	...	...	...	...	5	3	108	4·5	0·1	1·3	S.	10·35 p.m.
4	29·631	29·793	9 a.m.	29·558	4 a.m.	...	...	...	...	...	...	...	...	4	4	10	5	1	...	...	...	369	15·4	1·2	6·1	N.E.	5·30 p.m.
5	29·612	29·714	8 a.m.	29·522	3 p.m.	6	1	5	1	...	2	4	3	...	1	...	...	...	...	...	1	299	12·5	0·8	5·1	S.	5·47 p.m.
6	29·656	29·744	9 a.m.	29·583	5 & 6 p.m.	...	...	...	2	2	...	4	2	1	2	4	1	5	...	...	1	275	11·5	0·7	4·2	W	11·5 p.m.
7	29·613	29·693	9 a.m.	29·575	6 p.m.	...	...	...	...	...	2	3	3	1	...	9	3	2	1	...	...	238	9·9	0·5	5·8	N.E.	5·37 p.m.
8	29·629	29·758	8 a.m.	29·561	2 p.m.	3	8	...	...	...	1	1	...	...	1	3	3	4	...	...	...	437	18·2	1·7	10·1	N.N.E.	2·20 p.m.
9	29·842	29·915	10 p.m.	29·779	9 a.m.	12	1	...	3	4	...	...	...	...	...	...	...	...	...	...	4	263	11·0	0·6	5·8	S.	10·20 a.m.
10	29·788	29·877	9 a.m.	29·740	3 a.m.	2	...	...	3	11	1	2	...	...	...	3	...	1	...	1	...	132	5·5	0·2	0·6	E.	8·15 p.m.
11	29·774	29·798	8 p.m.	29·748	2 p.m. & 5 a.m	3	2	3	4	1	10	1	...	...	...	...	...	...	...	...	...	200	8·3	0·4	3·1	S.	1·36 p.m.
12	29·778	29·811	8 a.m.	29·741	4 & 5 p.m.	...	...	...	1	2	2	...	3	1	4	3	2	4	2	...	...	181	7·5	0·3	3·6	N.E.	9·20 p.m.
13	29·803	29·834	8 a.m.	29·722	3 p.m.	1	1	...	...	...	...	...	...	1	6	...	1	11	2	1	...	216	9·0	0·4	1·8	N.N.E.	5·15 a.m.
14	29·770	29·827	9 a.m.	29·730	3 & 4 a.m.	...	...	...	...	...	...	...	...	1	5	11	4	3	...	...	...	172	7·2	0·3	2·2	E.N.E.	3·55 p.m.
15	29·669	29·765	9 a.m.	29·625	4 p.m.	...	...	...	...	...	2	3	2	...	2	10	5	...	...	...	...	254	10·6	0·6	2·9	N.E.	4·35 p.m.
16	29·740	29·816	9 10 & 11 p.m.	29·672	9 a.m.	7	3	2	1	8	2	1	...	...	...	...	...	...	...	...	...	297	12·4	0·8	4·2	S.	4·35 p.m.
17	29·638	29·742	10 a.m.	29·574	4 a.m.	...	1	2	7	6	1	...	...	1	1	4	1	...	...	...	...	168	7·0	0·3	1·8	S.W.	3·15 a.m.
18	29·638	29·676	10 & 11 p.m.	29·579	3 p.m.	8	1	3	1	11	...	...	...	...	...	...	...	...	...	...	...	449	18·7	1·7	5·1	S.	4·32 p.m.
19	29·703	29·774	8 a.m.	29·661	3 p.m.	5	10	...	6	3	...	...	...	...	...	...	...	...	...	...	...	477	19·9	2·0	6·5	S.	4·47 p.m.
20	29·770	29·799	9 p.m.	29·749	3 p.m.	5	11	3	5	...	...	...	...	...	...	...	...	...	...	...	...	502	20·9	2·2	9·2	S.	1·30 p.m.
21	29·741	29·810	9 a.m.	29·653	6 a.m.	...	10	5	9	...	...	...	...	...	...	...	...	...	...	...	...	630	26·2	3·4	10·1	S.S.W.	3·35 p.m.
22	,,	,,	,,	,,	,,	4	5	2	...	...	...	...	...	...	...	...	1	4	5	1	2	611	25·5	3·3	25·2	S.S.W.	12·7 & 1·47 p.m.
23	,,	,,	,,	,,	,,	1	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	570	23·8	2·8	8·4	S.S.W.	1· 4 p.m.
24	29·833	29·906	8 a.m.	29·756	10 p.m.	10	12	...	...	...	...	...	...	...	...	...	...	...	1	1	524	21·8	2·4	8·4	S.S.W.	12 37 & 1·10 p.m.
25	29·951	30·062	8 a.m.	29·905	9 a.m.	18	...	...	...	...	...	...	...	...	...	...	...	...	2	4	475	19·8	2·0	4·2	S.S.E.	2·57 p.m.
26	30·072	30·109	10 p.m.	30·044	3 a.m.	5	...	...	1	7	2	...	...	...	...	...	...	...	1	3	5	272	11·3	0·6	3·4	S.S.E.	2·42 p.m.
27	29·971	30·081	9 a.m.	29·880	8 a.m.	...	...	...	1	2	...	6	2	3	3	7	...	...	...	...	...	205	8·5	0·4	1·6	N.E.	3·10 p.m.
28	29·771	29·882	9 a.m.	29·681	6 p.m.	5	1	1	1	...	...	...	2	2	6	5	1	...	...	...	...	479	20·0	2·0	6·1	S.	6·15 a.m.
Sums or Means.	29·761	February 26th. 30·109 10 p.m.		February, 5th, 29·522 3 p.m.		116	98	29	56	59	26	25	18	16	36	79	27	35	11	15	26	9303	13·8	1·2			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of FEBRUARY, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., February, 1874.									For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.			Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force 0-6	Clouds 0-10.	Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·024	81·6	89·0	S.E.	...	...	91·4	71 7	98 9	61·2	0·460	3	0·230	11	9·892
Tenterfield ...	80	...	...	...	..	E.	1·1	5·3	77·3	...	88·1	...	2·200	7	1·000	14	...
Grafton	22	...	...	83·5	...	S.E.	0·2	3·0	95·6	71·3	102·7	65·4	3·410	6	1·030	18	5·291
Inverell	122	...	...	70·9	71·0	E.	0·4	4·2	81·2	60 6	87·6	49·4	2·480	6	0·980	26	...
Bourke	393	...	...	79·4	...	S.E.	0·2	2·1	89·4	69·4	97·4	59·3	1·620	4	1·050	3	...
Narrabri	196	...	...	77·9	...	S.E.	1·4	1·1	89·2	66·5	97·9	55·5	4·100	8	1·310	25	5·136
Armidale.....	80	3278	...	67·4	91·0	W.	1·3	5·6	76·7	58·1	83·2	46·4	1·650	10	0·800	12	1·650
Goonoo Goonoo	110	1550	...	72·2	58·0	W.	0·6	1·9	82·1	62·2	90·0	48·9	1·900	5	1·100	18	...
Port Macquarie	0	53	29·966	72·1	...	S.W.	1·6	4·4	78·4	65·7	83·7	57·1	5·135	15	1·920	25	5·074
Murrurundi ...	94	1545	...	65·3	...	S.	2·1	2·8	70 2	60·3	92·1	50·3	...	...	...	...	...
Cassilis	120	...	...	72·2	...	.....	0·1	0·5	82·9	61·4	99·1	49·2	3·920	10	0·860	25	3·368
Scone	78	...	...	71·7	...	S.W.	1·0	4·4	79·5	63·8	91·6	51·2	3·370	8	0·710	25	3·439
Muswellbrook..	68	...	...	65·3	...	S.W.	0·4	5·0	76·5	54·1	87·2	45·4	1·710	4	0 540	25	...
Dubbo	182	...	...	66·6	...	E.	0·6	2·8	84·1	49 0	93·9	38·9	No	rain	gauge		
Mudgee	121	...	...	70·6	...	E.N.E.	1·1	...	82·2	58·9	93·4	40·0	3·240	11	0·750	26	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	4·800	14	0·860	25	...
West Maitland	18	...	...	73·8	...	S.E.	1·0	6·1	80·7	66·9	94·0	57·9	5·300	13	1·480	12	4·342
Lambton	7	...	...	69·7	...	E.	1·3	...	79·5	59·8	95·3	48·0	9·870	13	3·190	24	4649
Newcastle	1	112	29·945	72·1	...	S.W.	0·4	5·5	79·1	65·0	99·3	54·3	7·660	14	3·690	24	...
Orange.....	124	2891	...	66·4	...	N.	1·6	5·2	75·5	57·2	84·7	46·0	8·770	15	2·000	17	3.128
Bathurst	96	2200	29·949	67·1	73·0	W.	1·1	4·8	80·8	53·4	96·0	39·5	4·510	12	1·030	17	...
Forbes	176	...	30·103	73·1	...	W.	0·7	2·4	85·0	61·1	96·2	49·1	...	...	...	...	...
Kurrajong	36	1870	...	60·9	...	W.	2·9	6·1	66·5	55·3	83·0	48·0	8·535	21	0·860	22	...
Mount Victoria	61	3490	29·931	63·0	75·0	S.E.	0·0	6·5	73·1	52·9	89·1	41·7	6·570	17	1·850	17	2·177
Woodford	50	2192	29·862	64·5	...	W.	1·3	...	69·3	59·6	83·5	51·8	12·130	22	4·300	23	...
Parramatta.....	16	...	...	...	...	W.S.W.	0·7	7·0	...	66·1	...	58·9	8·780	5	3·450	24	...
South Reef	0	...	...	...	...	S.	1·5	6·9	...	...	...	...	10·870	18	3·310	23	...
Sydney.....	5	155	29·966	70·2	79·5	S.	1·2	7·3	75·9	64·5	94·5	57·8	10·487	21	3·990	23	4·654
Liverpool.....	16	...	29·971	69·0	...	S.	0 7	6·7	77·3	60·6	95·0	51·0	13·146	19	10·390	23	...
Wentworth.....	476	...	...	74·6	...	S.W.	2·0	1·1	88·6	60·5	106·7	51·8	0·120	1	0·120	11	6·486
Wilton	13	...	...	...	...	.. ..	...	...	...	...	...	...	7·790	12	1·800	22	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	15·110	15	6·430	23	...
Young	140	...	...	72·6	...	S.E.	1·4	1·8	85·7	59·5	98·0	52·1	1·140	5	0·600	12	4·402
Wollongong ...	0	...	...	70·5	...	S.S.W.	2·1	...	76·2	64·7	94·4	53·7	...	...	...	...	...
Moss Vale	31	...	...	63·6	...	S.	1·4	...	71·3	55·8	89·7	47·8	9·070	12	2·890	12	...
Goulburn.....	54	2129	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Terara	4	...	...	...	...	N.E.	2·2	6·8	...	...	...	...	11·420	15	3·700	12	...
Wagga Wagga	161	...	...	74·8	...	E.	0·6	...	88·0	61·5	99·2	50·4	0·510	3	0·220	14,16	10·054
Cape St. George	0	175	29·961	69·5	79·0	S.	1·8	6·5	76·5	62·5	91·2	55·6	8·870	15	1·910	12	...
Queanbeyan ...	60	...	...	63·0	...	S.S.E.	0·6	6·7	69·8	56·2	84·2	44·1	1·740	4	0·730	16	4·364
Urana	218	...	...	76·6	...	S.S.W.	2·2	1·0	91·1	62·0	103·5	51·6	...	...	...	...	10·563
Deniliquin	287	410	30·030	73·1	59·0	S.	1·6	0·8	90·9	55·2	103·3	45·2	...	...	...	...	...
Kiandra	88	4640	...	55·3	67·0	S.E.	3·2	5·1	76·6	33·9	92·2	24·3	1·950	4	0·550	21	...
Cooma	52	2637	...	63·7	..	S.	2·4	7·4	77·9	49·4	95·8	33·8	3·120	8	2·050	18	2·531
Albury	175	572	30·015	70 8	55·0	N.E.	1·0	1·8	90·4	51·2	99·9	40·3	Rain	not	measu	red.	
Eden.....	0	107	30·001	67·2	75·0	S.W.	1·8	7·0	73·2	61·2	83·0	53·1	8·800	17	2·960	18	...

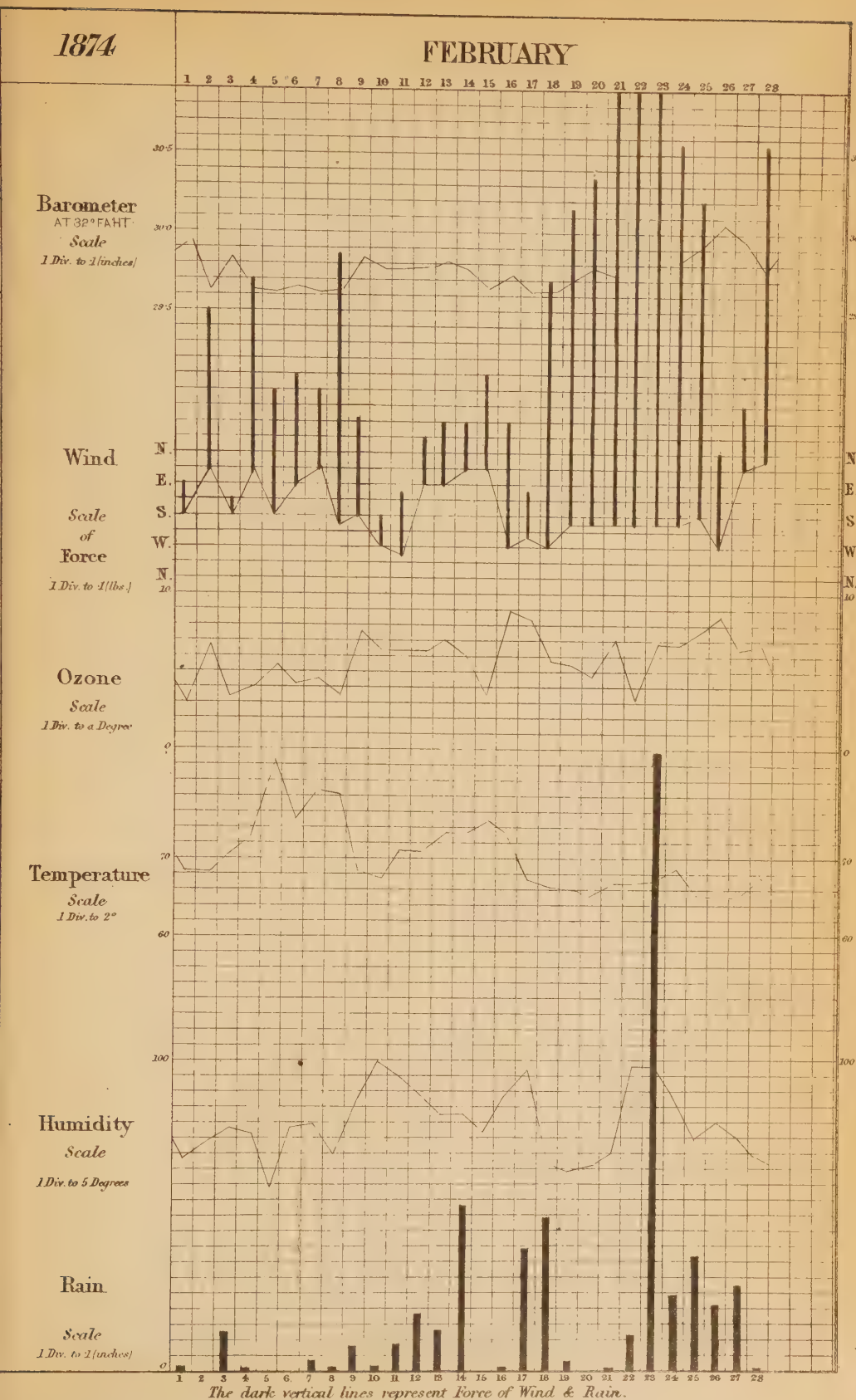
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Flood 1st to 5th; electric storms prevalent; thunderstorms, 4th, 6th, 10th, 19th and 24th.
Inverell—Thunderstorms, 10th, 11th, 12th; observations commenced, 10th.
Bourke—Whirlwinds 20th & 23rd, & numbers of beetles about, 10th; heavy thunderstorms, 2nd, 6th, 9th, 14th, & 17th.
Narrabri—Thunderstorms, 10th and 25th.
Armidale—Thunderstorm, 3rd.
Goonoo Goonoo—Heavy storms, 11th and 12th.
Port Macquarie—Thunder showers 11th and 17th.
Murrurundi—Thunderstorm, 11th; raining, 11th, 13th, 24th, and 25th; and foggy, 16th.
Cassilis—Thunderstorms, 2nd, 6th, 7th, 9th, 10th, 11th, 16th, 17th; and River up, 26th.
Scone—Heavy thunderstorms, 2nd, 11th, 16th; River up, end of month.
Muswellbrook—Hot, 5th, 6th, 7th, and 15th; river half bank high, 25th and 26th.
Dubbo—Thunderstorms, 9th, 10th, and 16th; and heavy rain, 15th and 24th.
Mudgee—Thunderstorms, 6th, 7th, 10th, and 17th.
Dalwood—Thunderstorms, 10th, 15th, and 18th.
West Maitland—Severe thunderstorm, 11th; S. squall, 6th, 25th; River rising, 24th.
Lambton—Thunderstorms, 2nd, 8th, 13th, 14th, 16th, and 17th; and lightning prevalent.
Newcastle—Stormy, 12th and 25th; and heavy sea, 25th.
Orange—Thunder and hailstorms, 2nd and 12th; and thunderstorms, 5th, 6th, 7th, 8th, 10th, 13th, 14th, 15th, 16th, and 18th.
Bathurst—Thunderstorms, 2nd, 5th, 6th, 7th, 11th, 12th, and 14th; and hot wind, 5th.
Kurrajong—Thunderstorms, 2nd, 6th, 7th, 8th, 11th, 14th, 15th, 18th; and S. squall, 22nd.
Mt. Victoria—Thunderstorm, 5th, 6th, 7th, 8th, 11th, 12th; and foggy during month.
Woodford—Thunderstorms, 2nd, 5th, 6th, 7th, 8th, 11th, 12th, 14th, and 15th.
Parramatta—Heavy rain, 23rd and 25th.
South Reef—Thunderstorms, 2nd, 5th, 6th, 8th, 10th, 11th, 12th, 15th, and 17th; hot wind, 5th; S. gales, 19th to 24th inclusive; lunar rainbow, 26th; and remarkably brilliant meteor, 2nd, illuminating face of North Head cliffs, falling outside.
Sydney—Thunderstorms, 2nd, 5th, 6th, 8th, 11th, 15th, 17th, and 18th; hot wind, 5th; very heavy rain, 10th; squally, 12th; gales, 22nd and 23rd; and lunar halo, 27th.
Liverpool—Flood, George's River, and two men drowned, 22nd; thunderstorms, 2nd, 5th, 6th, 7th, 8th, 11th, 12th, 13th, 14th, and 17th.
Wentworth—Hot wind, 5th; and stormy, 28th.
Wilton—Thunderstorms, 2nd, 6th, 7th, 8th, and 10th.
Cordeaux River—Thunderstorms, 2nd, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 14th, and 15th; flood, 2nd; highest flood known, 12th; and rain of 22nd, regular waterspout.
Young—Thunderstorms, 8th, 15th, and 28th.
Wollongong—Thunderstorms, 6th, 7th, 8th; storm of 6th fusing telegraph wires; S. gale, with heavy sea, 23rd.
Moss Vale—Thunderstorms, 2nd, 5th, 7th; hot wind, 5th; and foggy, 9th.
Terara—Thunderstorms, 5th, 6th, 7th, 8th; and hot and close, 8th.
Wagga Wagga—Thunderstorms, 14th and 16th; and N. W. gale, 16th.
Cape St. George—Thunderstorms, 5th, 6th, 7th; heavy sea, 6th, 17th, 18th 20th, 21st.
Queanbeyan—Thunderstorm, 17th; and stormy, 25th and 27th.
Urana—Rain gauge upset; light storm and rain, 11th; S. squall, with light rain, 16th.
Deniliquin—Hot wind and light thunderstorm, with few drops rain, 15th.
Kiandra—Thunderstorm, 7th.
Cooma—Stormy and wet, 18th.
Albury—Hot wind, 4th; thunderstorm, 15th, with rain.
Eden—Thunderstorm, 5th; heavy sea, 10th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney

Force of Wind 21st 34lbs on 22d 33lbs & 23rd 28lbs — Dew 4th & 8th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF MARCH, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price 6d.*] 3u 16—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

MARCH, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	30·185	On the 31st, at 9 a.m.
	Lowest Reading ...	29·516	On the 14th, at 2 p.m.
	Mean Height ...	29·872	

(Being 0·027 in. less than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure...	7·2 lbs.	On the 24th.
	Mean Pressure ...	0·5 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	N.E.	

(Prevailing direction during the same month for the preceding 15 years E. by N.)

TEMPERATURE	Highest in the Shade ...	85·1	... On the 14th.
	Lowest in the Shade ...	59·8	... On the 9th.
	Greatest Range	17·9	... On the 6th.
	Highest in the Sun ...	121·7	... On the 6th.
	Highest in Black Box with Glass Top	210·0	... On the 6th.
	Lowest on the Grass ...	53·9	... On the 19th.
	Mean Diurnal Range ...	11·5	
	Mean in the Shade ...	69·7	

(Being 0·7 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 24th, and 25th.
	Least	49·0	... On the 14th.
	Mean	77·9	

(Being 1·7 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	20 rain and 8 dew.	
	Greatest Fall	1·303 inch.	On the 25th.
	Total Fall	2·846 inches.	65 feet above ground.
		4·380 inches.	15 inches above ground.

(Being 1·375 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	4·205 inches.
OZONE	Mean Amount	5·5

(Being 0·7 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ..	Number of Days Lightning	6
CLOUDY SKY ..	Mean Amount	8·1
	Number of Clear Days ...	0
METEORS ..	Number Observed ...	0

REMARKS.

The weather was warm and cloudy, with very frequent light rain at Sydney and other stations south of Port Macquarie; to the northward, excepting the far inland stations, the rainfall was light. Thunderstorms were frequent. Aurora was seen on the 4th at Deniliquin, and lunar rings were observed at Sydney on the 30th, and 31st. On the 19th, a water-spout was observed off Cape St George.

SYDNEY, MARCH, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		Taken at 9, 3, & 9.
1		30·115	S.	215	66·7	60·3	67·8	63·2	4·6	65·5	81·3	61·3	68·5	66·0	0·017	10·0
2		·226	E.	108	68·1	63·9	72·7	60·9	11·8	66·8	100·6	58·4	68·6	77·0	0·121	10·0
3	Full Moon	·230	E.S.E.	201	70·1	63·8	73·5	62·1	11·4	67·8	101·6	59·5	69·1	68·0	0·001	9·3
4		·140	E.	187	72·1	66·6	76·6	65·1	11·5	70·9	117·2	64·5	69·5	72·3	0·001	10·0
5	In Equat. Apogee.	29·942	W.	104	69·7	68·7	75·3	65·6	9·7	70·5	100·7	65·8	70·7	94·0	0·304	10·0
6		·797	S.S.W.	271	72·2	68·5	81·1	63·2	17·9	72·2	121·7	62·4	70·9	81·7	0·139	8·0
7		30·065	S.	408	67·1	61·7	70·7	64·6	6·1	67·7	101·1	61·7	70·6	70·7	0·003	10·0
8		·206	S.	276	69·5	63·0	72·5	60·6	11·9	66·6	111·6	56·5	70·7	67·0	·0	4·0
9		·240	W.	164	63·9	62·3	71·1	59·8	11·3	65·5	106·0	60·2	70·5	90·7	0·801	9·3
10		·143	W.	126	67·6	63·0	74·0	60·2	13·8	67·1	114·4	59·4	70·1	76·0	0·193	4·0
11	Last Qr.	·024	W.	104	68·3	64·3	73·6	61·9	11·7	67·8	109·4	60·4	70·4	78·3	0·004	4·3
12		29·899	W.N.W.	116	70·4	66·3	77·7	61·6	16·1	69·7	118·1	58·4	70·2	78·3	0·003	3·0
13	G. S. Dec.	·856	N.E.	215	72·0	68·1	77·1	62·9	14·2	70·0	115·1	60·8	69·9	79·3	0·020	7·7
14		·753	N.W.	291	77·0	69·8	85·1	67·6	17·5	76·4	121·6	66·4	69·7	68·0	0·099	10·0
15		·903	S.E.	250	70·6	62·4	77·0	69·2	7·8	73·1	116·7	62·1	69·6	60·0	0·010	10·0
16		30·193	N.W.	74	67·5	65·2	75·0	62·8	12·2	68·9	108·2	60·1	71·0	86·3	0·001	10·0
17		·049	W.S.W.	158	72·5	69·8	78·6	63·6	15·0	71·1	117·0	60·8	71·1	85·3	0·040	10·0
18	New Moon. Perigee.	·018	W.	173	70·4	63·6	76·1	62·0	14·1	69·1	118·4	58·0	71·3	66·0	·0	6·7
19	In Equat.	·055	E.	176	69·7	62·4	74·0	60·6	13·4	67·3	112·9	53·9	71·2	63·3	0·001	1·0
20		·121	N.E.	333	71·2	66·6	75·4	62·6	12·8	69·0	113·4	59·7	71·5	76·3	0·355	1·0
21		·102	N.E.	347	73·1	66·7	77·1	66·0	11·1	71·6	111·6	61·0	71·2	68·0	·0	7·3
22		·007	N.E.	308	74·6	67·2	79·8	65·1	14·7	72·5	116·8	59·9	71·6	64·0	0·001	10·0
23		29·921	W.	287	70·5	67·3	78·8	67·1	11·7	73·0	109·5	63·6	71·4	82·3	0·001	10·0
24		30·118	S.	445	64·5	64·5	67·8	61·6	6·2	64·7	69·6	61·1	71·0	99·7	0·374	10·0
25	G. N. Dec. First Qr.	·208	S.	246	66·3	66·3	72·5	63·9	8·6	68·2	92·7	63·7	70·5	99·7	1·303	10·0
26		·296	N.W.	191	70·4	67·1	75·8	64·7	11·1	70·3	111·4	62·2	70·8	82·3	0·400	10·0
27		·121	N.E.	212	70·6	67·9	73·9	65·0	8·9	69·5	98·6	60·4	70·6	84·3	0·105	8·7
28		·055	N.E.	115	70·3	68·3	74·7	65·1	9·6	69·9	105·6	60·8	70·8	88·7	0·011	10·0
29		·123	E.N.E.	204	73·6	70·0	76·7	66·7	10·0	71·7	115·6	61·7	71·3	80·0	0.003	6·0
30		·279	E.	209	74·0	70·5	78·0	69·7	8·3	73·8	120·1	66·5	71·0	81·3	0·001	10·0
31		·359	N.	201	71·2	67·7	77·7	66·6	11·1	72·2	118·6	62·5	71·5	81·0	0·068	10·0
Means	.....	30·083	N.E.	6·715	70·2	65·9	75·4	63·9	11·5	69·7	108·9	61·1	70·5	77·9	Sum. 4·380	8·1

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·035 above the true mean for the day. Heavy Dew, 7th, 11th, 12th, 19th, 22nd, 23rd, 29th, and 30th.

SYDNEY, MARCH, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·083	...	...	4·0	1.—Cloudy and dull. Light rain at 4·35 p m. and 5·15 p.m. Drops of rain at 8·50 p.m., and rained heavily from 9·2 p.m. until about 9·45 p.m.
2	0·083	7·0	7·0	7·0	2.—Cloudy and dull. Light rain at 10·50 a.m. Clouds cleared at 10·30 p.m. and clouded up again.
3	0·145	5·0	7·0	6·0	3.—Cloudy and dull. Partial clearing of clouds between 9 a.m. and 11·30 a.m. Light rain at 3·56 p.m, lasted only a few minutes.
4	0·150	5·0	6·5	5·8	4.—Clouds broken during forenoon. Fine after 1 p.m., then cloudy and fine alternately. Dropping rain at 3 13 p.m. Light rain at 11·30 p.m.
5	0·059	6·0	6·0	6·0	5.—Cloudy. Light rain at intervals from 12 30 a.m. until 12·30 p.m. Morning foggy. Thunderstorm N.W. to S. 4·5 p.m. until 5·10 p.m. Lightning 4·44 p.m. and all evening, S.E., S.W., and W.S.W. from 7·22 p.m. Rained from 4·40 p.m. until 6·10 p.m.
6	0·195	4·0	5·0	4·5	6.—Cloudy and fine alternately. Forenoon very warm. Dew falling in the evening. S. gale at 9 30 p.m.
7	0·226	4·5	7·0	5·8	7.—Cloudy and dull with strong breeze until evening, when clouds begin to break. Partial clearing N.E. to N.W. from about 8 p.m. until 8·55 p.m. when it clouded up again.
8	0·141	...	...	4·5	8.—Fine, until 9·30 a m. Rainbow S.E. at 4·25 p.m., and showery until 6 4 p.m. Heavy rain 8·20 p.m. until 10·15 p m.
9	0·087	7·0	8·0	7·5	9.—Cloudy and showery, with partial clearing of clouds at intervals between showers.
10	0·138	5·0	4·0	4·5	10.—Cloudy until 12·30 p.m., with partial clearing at intervals. Light shower at 8·20 a.m. Afternoon and evening cloudy and fine alternately until 7·30 p m. when it finally cleared.
11	0·105	4·5	4·5	4·5	11.—Cloudy and fine alternately in the forenoon, rest of day fine. Evening calm and dew falling.
12	0·176	5·5	4·0	4·8	12.—Fine and very warm until about 2·30 p.m. Light thunderstorm 4·18 p.m. until about 4·30 p.m. from the W. and passed round by S. Drops of rain 5·34 and 5·53 p.m. Light steady rain 6·35 p.m. until about 7·45 p.m. Lightning N.W. at 7·20 p m.
13	0·205	5·0	5·0	5·0	
14	0·204	5·0	5·5	5·3	13.—Fine until 9 30 a.m. Evening dull, like thunderstorm after 5 p.m. Lightning from W. to S. after 8 p.m., and began to rain at 10·35 p.m.
15	0·207	...	...	2·8	14.—Cloudy and very hot, like thunderstorm in the afternoon. Lightning S.E. at 9 8 p m. A few very light showers after 10 p.m.
16	0·094	5·5	5·0	5·3	15.—Light clouds and cloudy all forenoon. Afternoon and evening fine. Some clouds formed again in the evening.
17	0·174	6·5	7·0	6·8	16.—Cloudy and dull, very light showers in the morning, also during evening. Light rain at 2·40 p.m. Partial clearing of clouds for awhile at 10 p.m.
18	0·183	4·0	5·0	4·5	17.—Light clouds and cloudy until 2 p.m., when clouds became heavy. Like thunderstorm S.W. at 2 p.m., also all afternoon and evening. Lightning S., S.E., and N.E. during evening. At 10·40 p.m. clouds began to clear. Fine at 10·55 p.m.
19	0·153	3·0	8·0	5·5	18.—Fine all morning until 11 a.m. and again at 11 p.m. Light clouds during day after 11 a m. and very warm. Lightning S. at 9 p.m., and S.S.W. at 10·10 p.m.
20	0·192	6·0	6·0	6·0	19.—Morning fine until 9 45 a.m., and from 2·30 p.m. until after 4 p.m. Fine again during evening after 7 p m.
21	0·171	4·0	8·0	6·0	20.—Cloudy and fine alternately. Heavy shower at 2·10 a.m. Raining again from 4 a.m. until 5·45 a.m.
22	0·185	...	...	3·5	21.—Cloudy and warm. After 7 p.m. clouds cleared. Fresh dry breeze during day.
23	0·064	8·0	7·0	7·5	22.—Light clouds and cloudy. After 8·30 p.m. clouds cleared. Dry atmosphere.
24	0·069	8·0	8·5	8·3	23.—Cloudy, dull, and very warm. Raining all evening from 5·59 p.m.
25	...	9·0	5·0	7·0	24.—Cloudy. Rained nearly all morning, afterwards a steady rain during remainder of the day.
26	0·127	6·5	8·0	7·3	25.—Cloudy. Raining at intervals, heavily at 9 a.m. Partial clearing of clouds after 7 p.m. Fine at 10·45 p.m.
27	0·069	5·0	7·0	6·0	26.—Cloudy. Light shower about 6 a.m. Showery also during evening from 6·20 p.m.
28	0·083	6·0	4·5	5·3	27.—Cloudy. Morning dull, and shower at 10·20 a.m, light clouds rest of day. Fine from 8 p.m. until 8·45 p.m. Dew fell in the evening.
29	0·160	...	...	3·3	28.—Cloudy. Morning dull. Forenoon warm. Breaks in clouds during afternoon and evening. Dew fell in the evening. Calm at 9 p.m.
30	0·127	5·5	7·0	6·3	29.—Light clouds and cloudy in the forenoon. Afternoon dull. Fine from 6 p.m. until about 8·45 p.m. Dew fell in the night.
31	0·150	3·5	5·0	4·3	30.—Cloudy. Partial clearing of clouds during day and very warm. Partial lunar ring at 9·7 p.m , about 30° diameter.
					31.—Cloudy. Forenoon very warm, with partial clearing of clouds at intervals. Showers at 6 a.m. and 8·3 a.m. and a heavy shower at 10·2 p.m. Lunar ring in the evening from 8 30 p.m., about 45° in diameter.
	Sum.				
Means	4·205	5·5	6·2	5·5	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·972	30·015	8 a.m.	29·930	2 p.m.	12	3	...	...	9	...	...	...	...	...	...	...	...	...	...	...	215	9·0	0·4	2·0	S.S.W.	10·15 a.m.
2	30·032	30·051	10 a.m.	29·995	4 a.m.	1	...	...	...	1	...	...	...	...	...	2	4	8	4	3	1	108	4·5	0·1	1·0	S.E.	8·45 a.m.
3	30·006	30·058	10 a.m.	29·950	5 a.m.	...	...	...	...	...	...	...	2	2	...	1	...	2	11	6	...	201	8·4	0·4	1·4	S.S.W.	12·40 p.m.
4	29·834	29·970	9 a.m.	29·741	4 a.m.	...	...	...	1	6	...	...	...	...	...	...	4	6	6	1	...	187	7·8	0·3	0·6	E.N.E.	11·14 a.m.
5	29·635	29·767	9 a.m.	29·593	4 & 5 a.m.	3	1	...	...	12	7	...	...	...	...	...	...	...	1	...	...	104	4·3	0·1	1·1	S.S.W.	4·38 p.m.
6	29·669	29·863	8 a.m.	29·548	3 p.m.	3	5	4	3	3	2	...	...	...	...	...	1	...	1	2	...	271	11·3	0·6	4·5	S.	10·12 p.m.
7	29·962	30·031	8 a.m.	29·887	9 a.m.	15	3	2	3	...	...	...	...	...	...	...	...	...	...	...	1	408	17·0	1·4	4·5	S.	12·28 p.m.
8	30·032	30·060	10 p.m.	30·005	2 p.m.	6	6	...	1	2	...	...	...	...	...	...	...	...	1	2	6	276	11·5	0·7	3·4	S.S.W.	5·13 p.m.
9	29·967	30·061	9 a.m.	29·926	3 & 4 a.m.	1	...	1	2	9	2	1	...	...	...	...	1	2	3	1	1	164	6·8	0·2	1·4	S.E.	2·30 p.m.
10	29·865	29·969	9 a.m.	29·813	4 & 5 a.m.	...	...	...	3	8	...	...	...	...	...	...	...	...	7	4	2	126	5·3	0·1	0·5	S.E.	1·57 p.m.
11	29·759	29·847	9 a.m.	29·702	4 & 5 a.m.	...	...	1	1	11	...	...	...	...	...	...	1	2	5	3	104	4·3	0·1	0·4	E.S.E.	2·50 p.m.
12	29·654	29·725	10 a.m.	29·613	3 p.m.	...	...	...	...	1	7	2	4	2	4	4	...	...	...	...	...	116	4·8	0·1	1·4	N.E.	1·12 p.m.
13	29·595	29·675	9 a.m.	29·540	5 a.m.	...	...	...	...	3	5	3	...	...	2	7	4	...	...	...	...	215	9·0	0·4	2·2	N.E.	2·45 p.m.
14	29·575	29·692	8 a.m.	29·516	2 p.m.	...	...	...	...	1	9	9	5	...	...	...	...	...	...	...	...	291	12·1	0·7	5·8	W.N.W.	10·5 p.m.
15	29·852	29·995	8 a.m.	29·729	9 a.m.	6	...	2	5	1	...	...	...	...	...	...	...	...	1	8	1	250	10·4	0·5	2·6	W.S.W.	10·35 a.m.
16	29·957	30·015	9 a.m.	29·895	5 & 8 a.m.	1	1	...	...	...	1	11	1	1	...	3	...	3	1	...	1	*74	4·6	1·1	0·7	N.E.	3·52 p.m.
17	29·762	29·880	9 a.m.	29·701	5 p.m.	...	...	2	5	4	...	1	...	2	2	4	2	2	...	...	...	*158	9·9	0·5	2·2	W.S.W.	11·22 p.m.
18	29·795	29·855	8 a.m.	29·733	3 p.m.	...	...	...	1	6	5	2	2	2	1	5	...	...	...	...	...	173	7·2	0·3	1·1	N.E.	4·48 p.m.
19	29·889	29·926	8 a.m.	29·857	3 p.m.	1	...	1	1	2	2	5	2	...	...	...	1	6	1	2	...	176	7·3	0·3	1·3	W.	9·12 a.m.
20	29·873	29·941	9 a.m.	29·859	3 p.m.	...	...	...	...	...	2	...	2	3	8	9	...	...	...	...	...	333	13·9	1·0	2·6	N.	12·45 a.m.
21	29·885	29·937	10 a.m.	29·837	7 a.m.	...	...	...	...	...	...	...	...	6	7	11	...	...	...	...	...	347	14·5	1·1	6·5	N.E.	5·2 p.m.
22	29·731	29·836	9 a.m.	29·694	4 & 6 p.m.	...	...	...	...	1	5	1	1	4	3	9	...	...	...	...	...	308	12·8	0·8	5·1	N.E.	6·50 p.m.
23	29·807	29·913	8 a.m.	29·741	3 p.m.	1	1	1	5	7	3	...	...	...	...	...	...	1	...	1	4	287	12·0	0·7	5·1	S.	6·45 p.m.
24	29·985	30·032	8 a.m.	29·932	1 p.m.	12	10	1	...	...	...	...	...	...	...	...	...	...	...	...	1	445	18·6	1·7	7·2	S.	6·20 a.m.
25	30·069	30·120	8 a.m.	30·024	2 p.m.	10	3	...	1	3	2	2	...	3	...	...	...	...	...	...	...	246	10·3	0·5	4·2	S.	9·45 a.m.
26	29·990	30·121	9 a.m.	29·913	4 a.m.	...	...	...	...	3	...	6	1	3	1	5	4	1	...	...	...	191	8·0	0·3	2·0	N.E.	9·50 p.m.
27	29·855	29·949	9 a.m.	29·812	4 a.m.	...	...	...	...	...	...	1	1	9	3	10	...	...	...	...	...	212	8·8	0·4	1·8	N.E.	3·55 p.m.
28	29·873	29·937	8 a.m.	29·825	2 p.m.	...	...	...	...	...	...	3	...	1	2	13	5	...	...	...	...	115	4·8	0·1	0·6	E.N.E.	3·8 p.m.
29	29·974	30·077	8 a.m.	29·888	2 p.m.	3	...	...	...	...	...	...	...	...	6	6	7	1	...	...	1	204	8·5	0·4	1·6	N.E.	6·12 p.m.
30	30·110	30·171	8 a.m.	30·058	3 p.m.	...	...	...	...	...	...	...	...	3	6	4	3	6	1	...	1	209	8·7	0·4	1·0	E.N.E.	4·35 p.m.
31	30·062	30·185	9 a.m.	29·989	4 & 5 a.m.	...	...	...	...	...	...	...	6	7	4	6	1	...	...	...	...	201	8·4	0·4	3·1	E.N.E.	12·30 p.m.
Sums or Means.	29·872	March 31st. 30·185 9 a.m.		March 14th, 29·516 2 p.m.		75	33	15	32	93	52	47	27	48	49	99	37	39	40	35	23	6715	9·1	0·5			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

* The Anemometer results for the 16th and 17th are only for 16 hours in each day.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of MARCH, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., March, 1874.									For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·024	75·7	57·0	S.E.	...	...	83·3	68·1	99 1	58·0	3·250	8	1·910	27	6·702
Tenterfield ...	80	...	...	63·9	..	E.	1·1	5·1	74·4	53·3	85·1	43·3	2·130	9	0·930	6	...
Grafton	22	...	...	80·8	...	S.E.	0·4	4·1	92·8	68·7	101·7	62·4	1·030	4	0·600	25	6·700
Inverell	122	...	...	67·3	65·0	E.	0·3	2·9	77·9	56·7	90·6	45·4	1·000	6	0·700	25	...
Bourke	393	...	...	73·7	...	N.E.	0·1	4·9	82·6	64·7	95·4	58·4	5·730	13	1·360	5	...
Narrabri	196	...	...	75·4	...	S.E.	0·8	2·0	87·2	63·6	96·3	55·3	1·880	4	0·950	25	6·747
Armidale.....	80	3278	...	65·4	...	S.E.	1·4	3·3	74·2	56·6	80·2	50·4	0·050	1	0·050	6	4·469
Goonoo Goonoo	110	1550	...	69·8	...	.....	0·6	0·3	80·9	58·7	88·0	48·9	0·940	1	0·940	25	...
Port Macquarie	0	53	30·005	71·6	...	S.W.	1·6	4·5	78·0	65·2	82·1	59·2	3·510	17	0·670	3	5·400
Murrurundi ...	94	1545	...	68·3	...	W.	0·7	3·3	79 6	56·9	98·1	50·3	0·890	1	0·890	24	...
Cassilis	120	...	...	68·9	...	Calm	0·2	0·7	79·8	58·0	98·1	47·2	1·830	5	0·930	24	3·556
Scone	78	...	...	66·3	...	S.W.	0 8	4·5	78·0	54·5	88·1	52·2	1·180	4	0·900	24	3·804
Muswellbrook..	68	...	...	73 6	...	S.W.	1·2	4·0	86·3	73·6	95·8	45·3	0·300	1	0·300	24	...
Dubbo	182	...	...	62·4	...	E.	0·5	4 2	78·2	46 5	86·9	40·9	No rain record ed				
Mudgee	121	...	...	67·1	...	E.N.E.	0·5	...	76·3	57·8	83·4	48·0	3·570	6	1·230	24	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	1·780	9	...	...	...
West Maitland	18	...	...	68·7	...	W.	0·7	5·7	79·6	57·8	89·7	50·4	2·570	6	1·350	25	4·494
Lambton	7	...	...	67·3	...	W.	1·1	...	77·0	57·5	86·3	50·0	7·040	7	3·900	25	6·212
Newcastle	1	112	30·017	71·7	73·0	S.W.	0 2	4·2	78·3	65·0	92·3	59·8	6·310	10	3·340	25	...
Orange.....	124	2891	...	63·8	...	N.E.	0·9	7·0	72 2	55·4	80·5	45·2	4·790	12	1·310	24	2·805
Bathurst	96	2200	30·047	61·9	80·0	W.	0·8	6·3	73·7	50·0	90·1	39·9	3·120	9	1·710	24	...
Forbes	176	...	30·161	67·1	...	S.	0·4	4·8	78·0	56·2	90·2	46·1	No rain record ed				...
Kurrajong	36	1870	...	60·2	...	N.E.	2·4	4·9	65·2	55·2	77·0	50·0	4·670	14	1·030	24	...
Mount Victoria	61	3490	30·021	61·4	80·0	W.	0·0	8·4	71·3	51·4	82·1	41·9	2·550	14	1·100	25	3·102
Woodford	50	2192	29·970	63·6	...	W.	0·1	...	67·8	59·3	78·5	53·6	7·530	20	2·020	24	...
Parramatta.....	16	...	...	...	...	S.W.	0·7	5·4	...	62·4	...	54·0	1·500	2	1·100	6	...
South Reef	0	...	...	...	...	S.E.	1·2	6·6	...	...	...	...	6·280	19	2·120	25	...
Sydney.....	5	155	30·083	69·7	77·9	N.E.	0·5	8·1	75·4	63·9	85·1	59·8	4·380	20	1·303	25	4·205
Liverpool.....	16	...	30·109	67·0	...	S.	0·4	6·7	75·0	58·9	82·0	49·0	2·379	14	0·860	24	...
Wentworth.....	476	...	...	69·5	...	S.W.	1·7	6·0	79·9	59·0	101·7	45·5	2·020	6	0·620	14	6·370
Wilton	13	...	...	...	...	.. ..	...	...	...	...	...	...	4·900	11	1·600	23	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	6·610	15	1·540	26	...
Young	140	...	...	68·3	...	E.	0·6	2·8	78·7	57·8	90·0	45·1	5·210	14	1·080	29	5·237
Wollongong ...	0	...	...	68·2	...	S.W.	1·5	...	74·3	62·1	79·4	50·7	...	...	...	...	...
Moss Vale	31	...	...	61 6	...	S.	0·8	...	68·3	54·8	77·7	48·8	8·750	12	3·200	24	...
Goulburn.....	54	2129	30·096	61·6	85·0	E.	0·0	7·2	70·3	52·9	87·1	41·8	4·360	13	1·740	24	2·332
Terara	4	...	...	...	...	N.E.	1·5	6·0	...	...	...	...	7·250	13	1·970	24	...
Wagga Wagga	161	...	...	66·9	...	Calm	0·0	...	77·7	56·1	86·6	48·9	4·830	12	1·980	23	5·555
Cape St. George	0	175	30·022	69·1	77·0	S.W.	1·1	6·8	74·4	63·7	84·2	57·6	8·360	14	2·410	26	...
Queanbeyan ...	60	...	...	60·2	...	Calm	0·0	7·3	65·1	55·3	73·2	44·1	2·960	11	1·020	24	2·856
Urana	218	...	...	69·8	...	N.E.	0·9	5·6	79·8	59·7	93·0	49·6	3·470	12	0·760	31	6·387
Deniliquin	287	410	30·080	69·6	71·0	S.	1·1	5·0	85·6	53·6	97·3	40·2	3·350	11	0·980	31	...
Kiandra	88	4640	...	50·7	84·0	N.W.	2·7	6·0	74·1	27·3	85·2	19·3	3·600	9	1·000	*	...
Cooma	52	2637	...	62·5	..	N.	2·7	8·2	75·6	49·3	87·9	37·2	3·140	8	0·850	†	0·793
Albury	175	572	30·061	67·6	74·0	S.E.	0·3	6·7	83·0	52·1	104·4	38·3	4·490	9	1·250	16	
Eden.....	0	107	30·174	66·6	78·0	S.W.	1·3	7·5	73·0	60·1	76·0	54·1	7·750	19	2·700	31	...

* 15th and 23rd. † 13th and 30th.

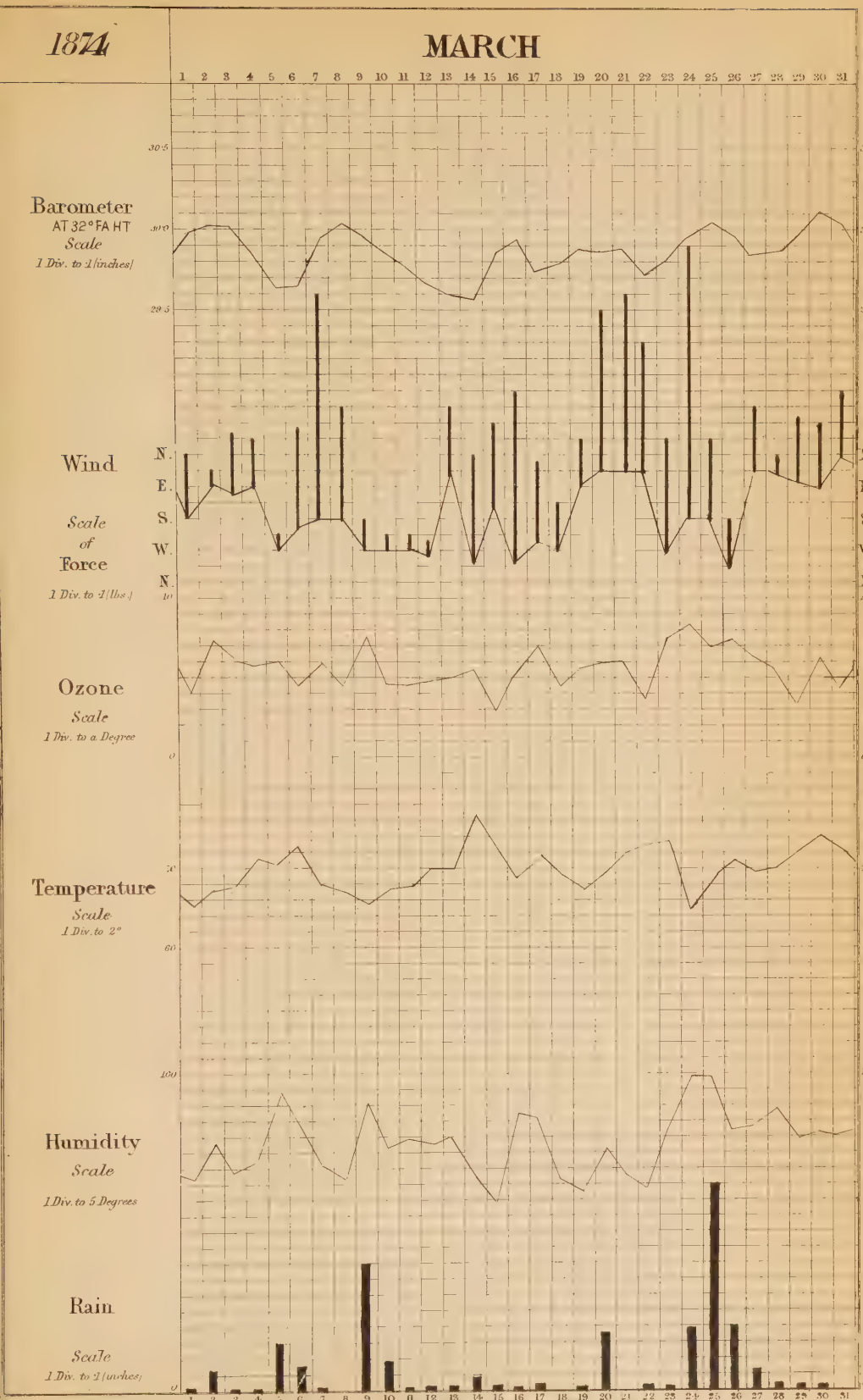
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Thunderstorms, 3rd, 5th, 6th, 11th, 26th, and 31st; and very hot, 11th.
Inverell—Thundershowers, 4th and 5th.
Bourke—Thunderstorms, 1st, 4th, 13th, 14th, 20th, and 22nd; and N.E. squall, 27th.
Narrabri—Squally, 23rd; and storm, 24th.
Goonoo Goonoo—Observations very imperfect.
Port Macquarie—Thunderstorms, 15th and 17th; and rather squally, 7th.
Murrurundi—Dull and oppressive, 4th.
Cassilis—Thunderstorms, 5th, 6th, 12th, and 14th; and violent N. squall, 23rd.
Scone—Thunderclouds, 30th.
Dubbo—Heavy storm, 3rd; and raining during month.
Mudgee—Dense fog, 6th,
West Maitland—Foggy, 25th and 26th; and hot, end of month.
Lambton—Lightning, 17th and 21st.
Orange—Thunderstorms, 13th and 14th.
Bathurst—Thunderstorms, 5th, 13th, and 14th.
Forbes—Thunderstorm, 14th.
Kurrajong—Thunderstorms, 5th, 12th, 13th, and 14th.
Mount Victoria—Thunderstorms, 12th, 13th, and 14th; foggy, 4th; and heavy rain, 23rd, 24th, and 25th.
Woodford—Thunderstorms, 5th, 13th, and 14th.
South Reef—Thunderstorms, 5th, 12th, 13th; rain squall, 25th; and lunar halo, 28th.
Sydney—Thunderstorms, 5th, 12th and 17th; stormy, 13th and 14th; and S. gale, 6th.
Liverpool—Thunderstorms, 5th, 12th, 15th; foggy, 6th, 22nd, 27th, 28th, and 29th; lunar halos 28th and 30th.
Wentworth—Thunderstorms, 4th and 13th; and stormy, 14th and 30th; hot winds, 9th; squally, 23rd.
Cordeaux River—Thunderstorms, 5th, 12th, and 13th; S.E. gale 15th; and N.E. gale, 25th.
Young—Thunderstorms, 4th, 13th, and 14th.
Moss Vale—Thunderstorms, 5th, 12th, and 13th.
Goulburn—Thunderstorms, 5th and 12th; and foggy, 5th, 13th, and 16th.
Terara—S.E. squall, 6th; and thunderstorms, 12th and 13th.
Wagga Wagga—Thunderstorms, 5th and 14th.
Cape St. George—Thunderstorms, 13th and 14th; waterspout, S.E, on 19th; S.E. gale 30th.
Queanbeyan—Thunderstorms, 12th and 13th.
Deniliquin—Thunderstorms, 3rd, 12th, 14th, 29th, and 31st; aurora 4th.
Cooma—Thunderstorms, 12th, 13th, and 14th.
Albury—Thunderstorms, 5th, and 14th; and gloomy, 29th.
Eden—Thunderstorm, 14th; and heavy E. sea, 25th.

METEOROLOGICAL CURVES



The dark vertical lines represent force of Wind & Rain.

Heavy Dew 7th 11th 12th 19th 22nd 23rd 29th & 30th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF APRIL, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price 6d.*] 3u 23—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

APRIL, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	30·190	On the 8th, at 9 a.m.
	Lowest Reading ...	29·588	On the 2nd, at 4 p.m.
	Mean Height ...	29·925	

(Being 0·089 in. less than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure...	13·5 lbs.	On the 29th.
	Mean Pressure ...	0·7 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 15 years W.)

TEMPERATURE	Highest in the Shade ...	76·4	... On the 13th.
	Lowest in the Shade ...	54·0	... On the 29th.
	Greatest Range	17·8	... On the 18th.
	Highest in the Sun ...	116·2	... On the 20th.
	Highest in Black Box with Glass Top	175·0	... On the 4th and 6th.
	Lowest on the Grass ...	48·6	... On the 6th.
	Mean Diurnal Range ...	10·8	
	Mean in the Shade ...	66·2	

(Being 1·3 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 8th, 9th, 10th, 14th, 22nd, 25th, and 26th.
	Least	62·0	... On the 4th.
	Mean	86·5	

(Being 9·1 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	17 rain and 9 dew.	
	Greatest Fall	2·045 inches.	On the 8th.
	Total Fall	7·762 inches.	65 feet above ground.
		9·114 inches.	15 inches above ground.

(Being 1·766 inch greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	2·346 inches.
OZONE	Mean Amount	5·9

(Being 1·0 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ..	Number of Days Lightning	5
CLOUDY SKY ..	Mean Amount	7·2
	Number of Clear Days ...	3
METEORS ..	Number Observed ...	2

REMARKS.

The weather was very cloudy and wet during the month, and the mean temperature rather above the average. At Sydney, and on the coast stations north of it the rainfall was heavy, ranging from 5 to 11 inches but west of the dividing range the fall was very light.

On the 13th, at 5 h. 40 m. p. m., a meteor, with the apparent diameter of the moon, was seen at Sydney, Singleton, Murrurundi, Cudgegong, and other parts of the Colony. Its motion was from north to south, slow, and the time it was visible variously estimated at from 15 to 60 seconds. As it was seen just at sunset, it must have been very brilliant. The color was light green. Observers saw a train of sparks. It disappeared like a rocket.

SYDNEY, APRIL, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		Taken at 9, 3, & 9.
1	In Equat. Apogee.	30·163	N.N.E	389	70·9	67·6	73·8	65·1	8·7	69·5	95·7	60·5	71·3	82·0	0·180	10·0
2	Full Moon	29·909	N.	181	70·4	67·5	74·1	68·4	5·7	71·3	105·8	65·2	71·6	84·0	·0	9·7
3		·867	W.S.W.	179	68·5	66·0	74·6	65·2	9·4	69·9	105·9	61·4	71·4	85·0	0·072	10·0
4		·932	W.	216	66·9	60·9	72·7	60·3	12·4	66·5	114·4	56·8	70·9	68·3	0·026	3·0
5		·851	W.N.W.	316	62·5	57·0	73·8	57·6	16·2	65·7	112·3	49·5	70·6	69·0	·0	0·0
6		30·092	N.W.	153	66·4	60·8	72·8	55·6	17·2	64·2	114·6	48·6	70·8	70·3	·0	0·0
7		·265	S.	245	69·0	66·2	73·0	57·1	15·9	65·0	109·6	51·5	70·3	84·3	0·001	7·7
8		·366	W.S.W.	92	65·3	65·8	73·2	63·1	10·1	68·2	103·3	62·7	70·4	100·0	2·045	8·0
9	G. S. Dec.	·299	E.N.E.	123	70·9	69·9	75·1	63·0	12·1	69·1	110·6	59·5	70·1	94·0	0·990	3·7
10	Last Qr.	·261	N.E.	143	69·9	68·6	75·3	64·4	10·9	69·9	114·6	61·3	70·5	92·7	0·013	7·0
11		·229	S.S.E.	147	70·2	68·3	74·1	66·6	7·5	70·4	100·6	64·5	70·2	89·0	0·025	9·7
12		·178	W.N.W.	104	67·5	66·4	74·1	62·8	11·3	68·5	113·4	59·0	70·6	93·0	0·055	10·0
13		·058	W.	176	68·9	67·2	76·4	62·7	13·7	69·6	115·5	58·9	70·3	90·0	0·001	5·0
14		·030	S.	297	64·7	62·5	67·2	64·4	2·8	65·8	83·6	60·5	70·1	87·3	0·980	10·0
15	In Equat.	·283	...	99	63·5	61·1	69·7	59·0	10·7	64·4	106·1	53·4	70·2	86·3	0·302	4·0
16	New Moon. Perigee.	·248	W.N.W.	127	65·7	63·5	72·5	56·2	16·3	64·4	111·8	50·6	69·8	87·7	0·008	3·3
17		·294	W.N.W.	137	65·8	62·7	73·0	57·7	15·3	65·4	113·5	52·7	69·6	82·3	0·008	0·0
18		·228	W.	102	68·0	64·1	75·4	57·6	17·8	66·5	109·6	51·2	69·5	79·3	0·004	6·7
19		·215	W.N.W.	80	65·1	63·3	74·4	61·9	12·5	68·2	111·8	56·5	69·9	89·0	·0	10·0
20		·108	W.	119	68·6	66·2	76·1	60·2	15·9	68·2	116·2	54·8	69·4	86·7	0·001	5·7
21	G. N. Dec.	·172	S.	322	66·7	64·5	71·4	60·6	10·8	66·0	105·9	56·5	69·7	86·7	0·001	9·7
22		·276	W.N.W.	80	65·6	65·1	70·1	61·5	8·6	65·8	96·8	56·5	69·5	97·0	0·419	8·7
23	First Qr.	·116	W.	182	68·1	66·8	76·0	60·5	15·5	68·3	112·7	56·1	69·3	92·0	0·640	3·0
24		·064	S.	452	64·3	60·8	69·0	62·5	6·5	65·8	76·4	55·1	69·1	79·7	0·003	10·0
25		·288	S.S.W.	344	59·6	57·7	63·9	59·0	4·9	61·5	83·2	...	69·3	88·3	0·001	10·0
26		·277	S.S.E.	273	59·6	59·6	68·2	56·6	11·6	62·4	99·4	52·2	69·1	100·0	0·475	10·0
27		·204	S.	420	62·5	61·1	65·7	59·6	6·1	62·7	75·5	56·5	69·5	91·3	1·340	10·0
28		·034	S.W.	646	60·8	59·6	63·1	59·2	3·9	61·2	77·6	57·6	68·3	91·7	1·488	10·0
29	Apogee. In Equat.	·002	S.S.W.	597	61·5	58·6	64·9	54·0	10·9	59·5	94·6	54·7	67·7	82·0	0·022	10·0
30		·075	S.S.W.	432	61·5	59·2	64·0	60·1	3·9	62·1	89·5	54·9	67·1	86·0	0·014	10·0
Means	.....	30·146	W.	7173	66·0	63·6	71·6	60·8	10·8	66·2	102·7	56·5	69·9	86·5	Sum. 9·114	7·2

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·048 above the true mean for the day. Dew fell, 7th, 10th, 13th, 16th, 17th, 18th, 20th, 21st and 24th.

SYDNEY, APRIL, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.
1	0·110	5·5	7·5	6·5
2	0·044	7·0	7·0	7·0
3	0·096	...	...	3·5
4	0·158	4·0	6·5	5·3
5	0·190	...	...	2·8
6	0·141	4·0	4·0	4·0
7	...	5·5	6·5	6·0
8	0·048	1·0	3·5	2·3
9	0·097	3·5	0·0	1·8
10	0·094	1·0	0·0	0·5
11	0·054	5·5	5·0	5·3
12	0·097	...	...	3·8
13	...	9·0	5·5	7·3
14	0·004	10·0	9·5	9·8
15	0·062	7·0	6·5	6·8
16	0·114	6·0	5·0	5·5
17	0·106	7·0	6·5	6·8
18	0·094	5·5	5·5	5·5
19	0·087	...	...	3·5
20	0·109	5·0	6·0	5·5
21	0·067	6·5	7·0	6·8
22	0·040	8·0	5·0	6·5
23	0·111	7·5	6·5	7·0
24	0·127	9·5	7·5	8·5
25	0·025	9·0	9·0	9·0
26	0·020	...	...	4·3
27	...	9·5	9·0	9·3
28	0·075	8·0	8·0	8·0
29	0·118	8·0	10·0	9·0
30	0·058	9·5	9·0	9·3
Sum.				
Means	2·346	6·5	6·2	5·9

REMARKS.

1.—Cloudy. Heavy shower at 2·45 a.m. Showers at 9·18 a.m. and 9·30 a.m. Forenoon dull. Fresh breeze during day. Lunar ring all evening about 30° diameter. Drops of rain 10·4 p.m.
2.—Cloudy. Morning dull, and dropping rain 9·19 a.m. Steady rain 9·30 a.m. until noon. Light shower 12·43 p.m. Very calm at 9 p.m.
3.—Cloudy. Clouds were light until about 6·15 p.m., when it became very dull. Shower at 6·35 p.m.
4.—Morning cloudy until 10 a.m. Cloudy again from 7·45 p.m. until after 8·30 p.m. Warm.
5.—Fine. No clouds in forenoon or evening; small patches S. in the afternoon. Strong dry wind.
6.—Fine. No clouds. Dry breeze.
7.—Cloudy and dull until 8 p.m.; then fine until about 8·45 p.m. Light rain 10·55 p.m. Meteor near zenith 7·34 p.m., about 4th magnitude, travelled about 4° in N.W. direction, and lasted half a second.
8.—Cloudy. Raining all forenoon except for short intervals. Afternoon showery. Fine from 6 p.m. until 7·55 p.m. Heavy shower at 8·18 p.m.
9.—Cloudy all forenoon; clouds broken. Afternoon and evening fine. Evening calm; and heavy dew falling.
10.—Dense fog all morning until after 10 a.m., and calm. Fine from noon until about 4 p.m. Lightning W. & W.N.W. during evening.
11.—Cloudy, clouds broken. Shower at 12·15 p.m., and drops of rain at 1·49 p.m. Evening fine from after 7 p.m. till after 8 45 p.m.
12.—Cloudy, clouds broken. Afternoon fine. Towards evening it turned cloudy again.
13.—Cloudy and fine alternately. Dew falling in the evening. At 5·40 p.m. a very large meteor seen to W., travelling slowly from N. to S. Appeared about the size of the moon, was intensely bright, and lasted nearly a minue, then exploded like a rocket, and disappeared.
14.—Cloudy and showery. Strong breeze until evening.
15.—Morning cloudy, rest of day fine. Calm at 3 p.m., and heavy dew falling at 9 p.m.
16.—Cloudy and fine alternately. Calm at 9 p.m., and heavy dew falling.
17.—Fine. No clouds during evening, and heavy dew falling.
18.—Cloudy, clouds light. Evening fine after 6·45 p.m. Calm at 9 p.m.
19.—Cloudy and fine alternately throughout day.
20.—Cloudy and fine alternately. Dense fog all morning from 6 a.m. until about 9·30 a.m. Lightning N.E. to N.W. about 8·20 p.m.
21.—Cloudy, clouds light in the morning. Evening dull. Light rain 1·53, 3·12, and 7·25 p.m. Very heavy shower at 2·27 p.m., another shower between 10 p.m. and 11 p.m. Rainbow S.E. at 3·12 p.m. Lightning S.E., E., and W., at 9 p.m., and S.W. at 7·30 p.m.
22.—Cloudy. Raining lightly at 11·10 a.m. Heavy shower at 12·30 a.m. Thunderstorm W. from 12·11 p.m. until 12·43 p.m. Raining 12·30 p.m. Lightning W. at 12·58 p.m. Heavy showers during afternoon and evening.
23.—Fine until after 8 p.m. Dense fog from daylight until 8 a.m. Like thunderstorm S.W. at 4·45 p.m. Fine again after 10 p.m. Lightning at midnight.
24.—Cloudy and dull. Drops of rain fell at 1 p.m. and 3·16 p.m. Raining lightly at 12·44 p.m., and again at 5 p.m. S. gale in the afternoon.
25.—Cloudy and showery. Rainbow S.E. at 3 p.m. Strong breeze in the afternoon.
26.—Cloudy. Heavy showers all day, also during night.
27.—Cloudy and showery all day; heavy during forenoon.
28.—Cloudy and dull. Forenoon showery. Light rain at intervals during afternoon and evening, until 8 p.m. Clouds getting light at 9 p.m.
29.—Cloudy; raining lightly at intervals. Strong S. breeze. Partial clearing of clouds between 12 30 p.m. and 2·30 p.m.; also between 7 p.m. and 8 p.m.
30.—Cloudy and dull. Light rain at 9·18 a.m. and 2·46 p.m. Spitting rain at 3 p.m. Raining lightly again between 4·45 and 5·45 p.m. Fine about 7·30 until 8·40 p.m., when it again turned cloudy, and began to rain lightly. Fine at 10·20 p.m.

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, APRIL, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	29·838	29·990	9 a.m.	29·717	6 a.m.	...	...	...	...	...	...	...	...	3	15	6	...	...	...	...	...	389	16·2	1·3	3·9 N.N.E. 7·35 p.m.
2	29·644	29·728	10 a.m.	29·588	4 p.m.	...	...	...	...	2	2	3	3	11	1	2	...	...	...	...	...	181	7·5	0·3	1·4 N.N.E. 1·7 p.m.
3	29·693	29·750	8 a.m.	29·625	4 p.m.	...	1	1	5	4	4	3	1	...	...	3	2	...	...	...	...	179	7·5	0·3	4·5 S.W. 6·45 p.m.
4	29·671	29·755	9 a.m.	29·610	3 a.m.	...	...	2	6	10	1	1	...	...	2	2	...	...	...	...	...	216	9·0	0·4	2·0 W.S.W. 9·0 a.m.
5	29·739	29·895	8 a.m.	29·625	2 & 4 p.m.	...	...	2	5	8	9	...	...	...	...	...	...	...	...	...	...	316	13·2	0·9	3·6 W.S.W. 10·14 a.m.
6	29·930	30·065	8 a.m.	29·861	3 & 5 p.m.	...	...	...	1	2	5	6	...	1	3	4	2	...	...	...	...	153	6·4	0·2	1·3 N.E. 4·45 p.m.
7	30·103	30·147	12 p.m.	30·062	2 p.m.	14	...	1	3	1	...	...	...	...	...	...	...	...	...	2	3	245	10·2	0·5	1·8 S. 10·14 a.m.
8	30·139	30·190	9 a.m.	30·097	4 & 5 a.m.	4	...	4	8	5	...	...	...	...	...	...	...	...	...	1	2	92	3·8	0·1	1·0 E.S.E. 8·15 a.m.
9	30·076	30·125	9 a.m.	30·045	3 a.m.	...	...	...	...	...	...	...	1	6	1	2	12	1	1	...	...	123	5·0	0·1	1·0 E. 9·30 a.m.
10	30·033	30·087	9 a.m.	29·987	4 p.m.	4	3	2	1	3	1	...	...	...	...	7	1	...	1	...	1	143	6·0	0·2	1·4 S. 8·15 a.m.
11	30·000	30·053	9 a.m.	29·967	4 p.m., and 3 & 4 a.m.	4	2	3	...	4	1	...	...	...	...	...	...	...	...	4	6	147	6·1	0·2	1·8 S.S.W. 9·42 a.m.
12	29·906	30·003	9 a.m.	29·846	4 a.m.	...	...	...	...	1	10	3	...	...	1	3	4	2	...	...	...	104	4·3	0·1	0·5 E.N.E. 12·40 p.m.
13	29·774	29·881	9 a.m.	29·725	3 a.m.	...	...	1	...	8	2	1	2	4	3	3	...	...	...	...	...	176	7·3	0·3	2·0 S.S.W. 8·55 a.m.
14	29·990	30·096	8 a.m.	29·854	10 a.m.	11	2	1	5	2	...	...	...	...	...	...	...	...	...	...	3	297	12·4	0·8	4·2 S. 10·45 a.m.
15	30·058	30·106	10 a.m.	30·029	3 & 4 a.m.	1	1	...	...	2	1	...	...	1	...	2	2	...	2	1	...	99	4·1	0·1	0·4 E. 4·30 p.m.
16	30·032	30·104	8 a.m.	29·979	4 p.m.	1	...	1	...	5	6	...	...	1	...	4	4	...	...	...	1	127	5·3	0·1	0·5 E.N.E. 3·38 p.m.
17	30·046	30·115	10 a.m.	30·005	3 & 4 a.m.	...	...	...	...	2	12	1	...	3	1	5	...	...	...	...	...	137	5·7	0·2	1·0 N. 8·45 p.m.
18	29·999	30·048	9 a.m.	29·958	3 p.m.	5	1	...	...	12	6	...	...	...	...	...	...	...	...	...	...	102	4·3	0·1	0·7 S. 5·31 p.m.
19	29·956	30·041	9 a.m.	29·900	3, 4, 5, & 6 a.m.	...	1	3	...	1	4	1	2	2	1	1	1	2	4	...	1	80	3·3	0·1	0·4 W. 6·47 a.m.
20	29·879	29·957	8 a.m.	29·822	3 p.m.	...	3	...	...	8	6	...	...	1	4	1	...	...	...	...	...	119	5·0	0·1	0·6 W. 6·46 a.m.
21	30·038	30·089	8 a.m.	29·984	10 a.m.	10	6	...	1	6	...	...	...	...	...	...	...	...	...	...	1	322	13·4	0·9	2·9 S.S.W. 12·0 p.m.
22	30·001	30·090	9 a.m.	29·940	3, 4, 5, & 6 a.m.	1	...	1	...	1	5	4	1	2	1	1	2	4	1	...	...	80	3·3	0·1	0·7 S.S.W. 11·30 a.m.
23	29·838	29·939	9 a.m.	29·803	4 p.m.	...	...	...	1	5	4	1	5	...	3	4	1	...	...	...	...	182	7·6	0·3	2·6 S.W. 3·0 a.m.
24	30·004	30·100	8 a.m.	29·889	9 a.m.	15	6	1	1	...	...	...	...	...	...	...	...	...	...	...	1	452	18·8	1·8	6·5 S. 12·6 p.m.
25	30·083	30·118	10 a.m.	30·058	1, 2, & 4 p.m.; 4 & 6 a.m.	4	8	2	2	...	5	...	...	...	...	...	...	...	...	1	2	344	14·3	1·0	3·9 S. 2·40 p.m.
26	.....	.....	.....	.....	.....	6	4	2	1	2	1	...	...	...	...	...	...	...	1	1	6	273	11·4	0·6	3·1 S.E. 1·37 p.m.
27	29·885	30·030	9 a.m.	29·827	6 & 7 a.m.	9	5	8	...	...	...	...	...	...	...	...	...	...	...	1	1	420	17·5	1·5	4·5 S. 11·47 a.m.
28	29·797	29·851	9 a.m.	29·770	3 a.m.	...	11	13	...	...	...	...	...	...	...	...	...	...	...	...	...	646	26·9	3·6	8·8 S.S.W. 5·35 p.m.
29	29·826	29·873	8 a.m.	29·783	2 p.m.	...	18	6	...	...	...	...	...	...	...	...	...	...	...	...	...	597	24·9	3·1	13·5 S.S.W. 1·30 p.m.
30	29·858	29·894	9 & 10 a.m.	29·819	6 a.m.	...	12	3	5	4	...	...	...	...	...	...	...	...	...	...	...	432	18·0	1·6	5·1 S.S.W. 11·0 a.m.
Sums or Means.	29·925	April 8th, 30·190 9 a.m.		April 2nd, 29·588 4 p.m.		89	84	57	45	98	85	24	15	35	36	50	31	9	10	11	28	7173	10·0	0·7	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of APRIL, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., April, 1874.						Temperature in Shade.				For 24h. previous to 9 a.m.				
						Wind.							Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force 0·6	Clouds 0·10.	Mean Max.	Mean Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·185	70·4	59·0	E.N.E.	....	...	79·0	61·8	87·1	52·5	1·490	3	1·400	1	...
Tenterfield ...	80	...	...	57·8	..	E.	0·9	5·7	68·1	47·4	74·1	38·3	1·120	6	0·430	4	...
Grafton	22	...	...	72·9	...	S.	0·6	6·5	84·9	60·8	90·7	54·4	6·417	13	1·950	24	1·498
Inverell	122	...	...	64·1	86·0	S.W.	0·7	3·4	77·1	51·0	84·6	43·4	1·960	6	1·350	13	...
Bourke	393	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Narrabri	196	...	...	69·9	...	S.E.	0·7	1·5	81·0	58·8	89·1	52·5	1·770	3	1·260	3	4·031
Armidale.....	80	3278	...	59·2	69·0	W.	1·6	6·0	68·9	49·4	76·9	41·1	1·540	7	1·020	27	4·164
Goonoo Goonoo	110	1550	...	64·1	...	.....	0·2	3·5	74·1	54·1	83·0	48·4	2·010	4	0·900	3	...
Port Macquarie	0	53	30·079	68·1	...	S.W.	1·5	5·3	75·2	61·0	80·3	56·1	5·745	18	1·380	25	4·485
Murrurundi ...	94	1545	...	62·5	...	W.	0·9	3·0	71·0	53·9	78·1	45·3	1·870	3	1·000	2	...
Cassilis	120	...	...	64·4	...	S.E.	0·2	0·6	74·3	54·4	83·1	42·2	1·050	4	0·310	*	2·811
Scone	78	...	...	62·6	...	S.	1·0	5·3	65·0	60·2	78·6	50·2	1·040	7	0·500	2	2·145
Muswellbrook..	68	...	...	67·9	...	S.E.	1·7	3·0	80·2	55·6	85·8	47·3	No	rain	record	ed	...
Dubbo	182	...	...	57·8	...	S.E.	0·4	2·3	73·3	42·3	79·9	33·9	No	rain	record	ed	...
Mudgee	121	...	...	62·6	...	E.N.E.	...	5·2	72·9	52·2	75·4	44·0	1·130	3	0·550	2	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	5·120	9	...	...	...
West Maitland	18	...	...	...	...	W.	1·0	5·6	...	51·5	...	43·6	3·960	9	1·190	27	2·217
Lambton	7	...	...	63·2	...	W.	1·3	...	73·3	53·0	80·3	45·0	6·560	11	1·340	28	3·090
Newcastle	1	112	30·101	67·6	77·0	S.W.	0·3	4·2	74·3	60·8	81·3	54·3	6·660	10	2·810	29	...
Orange.....	124	2891	...	61·8	...	S.	1·0	4·8	67·0	56·5	76·2	40·4	2·170	6	0·800	2	1·281
Bathurst	96	2200	30·115	60·9	83·0	S.E.	0·6	4·8	75·2	46·6	85·0	32·0	1·690	5	1·200	11	...
Forbes	176	...	30·269	62·9	...	.....	0·2	1·5	74·5	51·3	81·2	40·1	No	rain	measu	red	...
Kurrajong	36	1870	...	57·3	...	W.	2·4	5·0	62·0	52·5	67·5	46·0	3·250	12	0·900	26	...
Mount Victoria	61	3490	30·123	57·5	81·0	S.E.	0·0	6·3	65·9	49·1	73·9	40·9	1·110	13	0·200	13	1·490
Woodford	50	2192	30·030	61·1	...	W.	0·8	...	64·9	57·3	70·3	51·4	3·560	15	1·300	13	...
Parramatta.....	16	...	...	...	...	S.W.	1·0	5·6	...	62·5	...	52·0	11·540	4	4·240	27	...
South Reef	0	...	...	...	...	S.	1·3	6·8	...	...	...	...	7.480	17	2·260	8	...
Sydney.....	5	155	30·146	66·2	86·5	W.	0·7	7·2	71·6	60·8	76·4	54·0	9·114	17	2·045	8	2·346
Liverpool.....	16	...	30·116	63·5	...	W.	0·6	5·8	71·0	56·0	76·0	47·0	2·935	15	1·030	27	...
Wentworth.....	476	...	...	65·4	...	S.W.	1·4	3·0	76·1	54·7	86·8	42·5	0·540	4	0·430	1	5·164
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	1·670	6	0·750	26	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	3·970	12	2·070	27	...
Young	140	...	...	63·8	...	S.E.	0·4	0·5	74·8	52·7	83·0	45·1	2·040	4	1·040	2	4·664
Wollongong ...	0	...	...	66·7	...	S.W.	2·0	...	72·2	61·2	76·4	55·7	No	rain	record	ed	...
Moss Vale	31	...	...	57·6	...	S.	0·9	...	63·7	51·5	69·7	43·8	2·140	5	0·680	27	...
Goulburn.....	54	2129	30·186	61·4	88·0	S.	0·0	7·0	74·3	48·4	88·5	40·6	0·880	6	0·250	20	2·140
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	64·5	...	W.	...	...	74·7	52·3	87·1	34·9	2·700	6	1·430	2	...
Cape St. George	0	175	30·118	66·4	76·0	S.	1·5	6·2	73·2	59·6	78·2	54·6	2·600	12	0·610	28	...
Queanbeyan ...	60	...	...	54·4	...	E.S.E.	0·0	4·4	58·6	50·1	67·2	39·1	0·780	4	0·310	24	2·661
Urana	218	...	...	65·1	...	N.N.E.	1·2	1·7	76·2	53·9	88·1	43·6	0·660	4	0·290	1	4·026
Deniliquin	287	410	30·166	63·0	81·0	S.W.	1·2	2·0	79·2	46·7	87·3	39·2	2·970	6	1·030	2	...
Kiandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cooma	52	2637	...	...	..	S.	2·1	7·1	...	42·1	...	31·3	0·040	1	0·040	20	0·868
Albury	175	572	30·164	61·7	76·0	S.W.	0·4	3·1	79·1	44·2	87·4	35·3	1·920	3	1·440	2	...
Eden.....	0	107	30·146	62·4	79·0	S.	1·2	4·1	67·9	56·8	74·0	52·1	2·140	6	1·300	27	...

* 2nd and 13th.

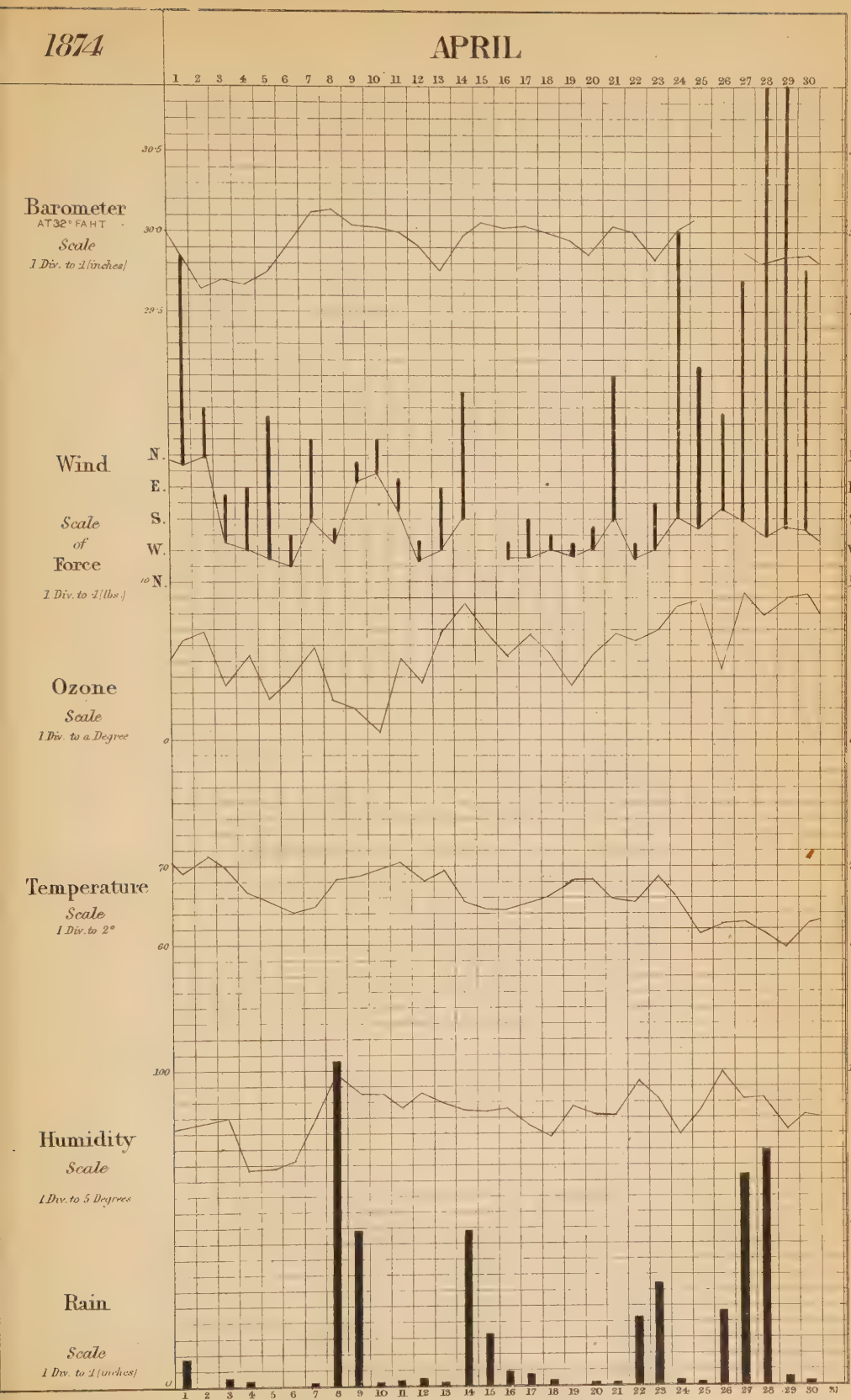
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Grafton—Heavy rain, 23rd.
Inverell—Heavy rain on 12th.
Narrabri—Fine and clear during month; raining, 1st.
Port Macquarie—Heavy sea, 7th, 26th, 27th, 28th, and 29th, and thunder-squall, 14th.
Cassilis—Thunderstorms, 11th, 12th, 13th, 14th, and 20th; and foggy, 16th.
Scone—Thunderstorm, 14th.
Muswellbrook—Heavy rain, 1st, but not measured.
Mudgee—Heavy storm, 14th; and cold, 18th.
Dalwood—Thunderstorm, 22nd.
West Maitland—Heavy thunderstorms, 11th and 22nd.
Lambton—Thunderstorms, 11th and 13th.
Newcastle—Stormy, 25th, 28th, and 29th; and very heavy sea, 28th and 29th.
Orange—Stormy, 10th and 11th, and foggy, 23rd.
Bathurst—Thunderstorm, 10th; and slight frost, 18th.
Kurrajong—Thunderstorms, 10th, 11th, 12th, and 13th.
Mount Victoria—Stormy, 11th; and foggy during month.
Woodford—Thunderstorms, 10th, 12th, 13th, and 25th; and foggy, 1st, 8th, and 9th.
Parramatta—Thunderstorm, 12th; and foggy, 10th and 22nd.
South Reef—Thunderstorm, 3rd; heavy rain squalls, easterly swells, and south gales, end of month.
Sydney—Lunar ring, 1st; dense fogs, 20th and 23rd; Thunderstorm, 22nd; S. gale, 24th.
Liverpool—Thunderstorms, 3rd, 21st, and 22nd; and foggy, 12th, 19th, and 22nd.
Wentworth—Stormy, 1st; thunderstorm, 13th; and hot wind, 23rd.
Wilton—Observer absent, 1st to 9th.
Cordeaux River—Thunderstorms, 20th and 21st; and brilliant meteor, 13th.
Wollongong—Raining, 13th; and showery, 24th.
Goulburn—Dense fogs, 10th and 13th.
Cape St. George—S. gales, 3rd, 7th, 28th, and 29th; S.E. gale, 14th; and heavy sea, 28th and 29th.
Queanbeyan—Foggy, 13th.
Urana—Cold, 2nd and 3rd.
Deniliquin—Thunderstorm, 13th; and cold wind, 14th.
Cooma—Frosty, 15th; and foggy during month.
Eden—Aurora, 8th; and heavy S.E. sea, lasted six days.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney

Force of Wind 3. 9lbs 28th & 31lbs 29th Heavy Dew 7th 10th 15th 16th 17th 18th 20th 21st & 24th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF MAY, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price 6d.*] 3u 24—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

MAY, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading ...	30·368 inches	on the 26th, at 11 a.m.
	Lowest Reading ...	29·448	„ on the 3rd, at 5 and 6 a.m.
	Mean Height ...	29·823	

(Being 0·120 in. less than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure...	18·6 lbs.	On the 20th and 22nd.
	Mean Pressure ...	1·1 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 14 years W.)

TEMPERATURE	Highest in the Shade ...	71·1	... On the 5th.
	Lowest in the Shade ...	47·6	... On the 24th.
	Greatest Range	18·6	... On the 18th.
	Highest in the Sun ...	109·6	... On the 5th.
	Highest in Black Box with Glass Top	149·0	... On the 8th and 9th.
	Lowest on the Grass ...	41·0	... On the 23rd.
	Mean Diurnal Range ...	11·5	
	Mean in the Shade ...	58·9	

(Being 0·5 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 3rd, 25th, 26th, 27th, and 30th.
	Least	50·0	... On the 22nd.
	Mean	78·8	

(Being 3·4 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	15 rain and 1 dew.	
	Greatest Fall	3·920 inches.	On the
	Total Fall	7·183 inches.	65 feet above ground.
		8·623 inches.	15 inches above ground.

(Being 4·775 inches greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	2·467 inches.	
OZONE	Mean Amount	6·0	

(Being 1·5 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ..	Number of Days Lightning	2
CLOUDY SKY ..	Mean Amount	4·9
	Number of Clear Days ...	5
METEORS ..	Number Observed ...	1

REMARKS.

The weather was fine and cool, with heavy rain at the beginning and end of the month, the total fall being 4·775 inches greater than the average for this month. At the country stations the rainfall was light north of Newcastle, and moderate to south; the fall at Sydney and South Reef being greater than at any other places. On the 11th a violent thunderstorm, with hail, passed over a large part of the Colony.

SYDNEY, MAY, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water. 9 a.m.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.		Mean 9.3.9.		Taken at 9, 3, & 9.
1		30·002	W.S.W.	235	64·8	62·0	70·2	57·2	13·0	63·7	102·6	51·2	66·7	83·3	0·026	10·0
2	Full Moon	29·864	S.S.W.	654	63·3	61·8	65·6	60·2	5·4	62·9	73·7	55·9	66·8	90·3	0·188	10·0
3		·798	W.S.W.	645	61·7	61·7	63·7	61·2	2·5	62·5	90·7	59·3	66·5	100·0	1·348	10·0
4		·666	W.N.W.	388	64·8	58·9	70·7	57·6	13·1	64·2	105·5	54·5	66·1	68·0	3·920	1·7
5		·926	W.N.W.	142	64·8	59·0	71·1	57·7	13·4	64·4	109·6	48·2	66·3	68·7	·0	3·0
6	G. S. Dec.	·939	W.N.W.	156	59·1	57·7	64·1	55·0	9·1	59·6	89·6	49·5	66·1	90·7	·0	7·3
7		·873	W.N.W.	268	63·2	57·6	69·5	57·2	12·3	63·3	104·9	49·0	66·5	70·0	0·121	0·7
8		30·074	W.	176	59·9	55·5	66·8	52·9	13·9	59·9	103·6	44·5	66·6	75·0	·0	3·7
9	Last Qr.	·181	W.N.W.	113	58·2	55·7	68·3	50·5	17·8	59·4	107·2	46·0	66·4	84·3	0·001	2·3
10		·143	N.N.E	279	56·1	54·5	66·1	53·0	13·1	59·6	100·4	48·6	66·5	89·0	0·012	0·0
11		29·865	N.N.W.	342	63·5	57·7	71·0	57·2	13·8	64·1	105·1	53·4	66·1	68·3	·0	3·3
12		·841	W.N.W.	407	57·0	51·3	63·1	52·5	10·6	57·8	97·2	43·8	66·5	67·0	0·180	6·7
13	In Equat.	·879	W.	450	59·4	54·0	67·0	53·6	13·4	60·3	102·6	48·6	66·3	68·7	·0	4·0
14	Perigee.	·972	S.S.W.	409	58·6	53·8	65·8	51·9	13·9	58·9	99·6	46·4	66·1	71·7	·0	3·0
15		·975	W.	333	59·1	53·1	64·1	52·1	12·0	58·1	97·1	47·0	66·5	65·7	·0	5·0
16	New Moon.	30·012	W.S.W.	397	57·7	52·3	62·1	50·0	12·1	56·1	94·1	45·1	66·1	68·0	·0	3·3
17		29·957	W.	325	53·3	49·5	66·2	49·6	16·6	57·9	100·6	44·5	66·3	75·0	·0	0·0
18		·949	W.N.W.	124	58·8	53·9	68·5	49·9	18·6	59·2	104·6	42·9	66·1	73·0	·0	0·3
19	G. N. Dec.	30·015	W.	205	56·6	54·8	61·0	52·0	9·0	56·5	62·8	42·5	66·3	88·0	0·001	10·0
20		29·712	W.	567	56·8	51·3	62·5	51·9	10·6	57·2	96·7	49·1	66·0	69·0	0·305	3·3
21		·972	N.W.	311	56·0	49·7	61·4	49·1	12·3	55·3	95·1	41·5	66·1	63·7	·0	2·7
22		·822	W.	594	55·9	48·1	61·3	52·3	9·0	56·8	96·4	42·6	66·0	56·3	·0	0·0
23	First Qr.	30·111	W.	453	54·3	48·0	60·1	48·6	11·5	54·4	95·4	41·0	65·7	63·0	·0	0·0
24		·230	W.S.W.	455	52·0	47·7	63·8	47·6	16·2	55·7	99·3	42·0	65·9	72·0	·0	0·0
25		·435	W.	205	55·8	55·8	59·9	52·4	7·5	56·2	85·7	48·5	66·0	100·0	0·274	10·0
26	In Equat. Apogee.	·543	W.	114	58·0	57·2	61·7	53·7	8·0	57·7	78·0	...	65·9	94·3	1·336	9·7
27		·528	W.	162	56·4	56·3	60·2	54·9	5·3	57·6	76·6	52·0	65·7	99·0	0·471	10·0
28		·369	W.N.W.	135	55·9	55·6	65·2	53·5	11·7	59·4	83·6	50·3	65·9	97·0	0·339	8·0
29		·199	W.N.W.	161	57·2	54·5	64·5	51·5	13·0	58·0	100·2	46·5	65·5	84·0	0·093	5·3
30		·099	W.	191	55·1	52·0	61·5	49·6	11·9	55·6	78·7	44·5	65·3	80·0	·0	7·3
31	Full Moon.	·061	W.	197	51·5	51·5	56·1	49·1	7·0	52·6	82·5	44·8	65·5	100·0	0·008	10·0
Means	.....	30·033	W.	9593	58·2	54·6	64·6	53·1	11·5	58·9	94·2	47·5	66·1	78·8	Sum. 8·623	4·9

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·025 above the true mean for the day. Dew, 9th.

SYDNEY, MAY, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.
1	0·072	6·0	7·5	6·8
2	...	9 0	9·0	9·0
3	...	...	...	4·8
4	0·136	3·5	8·0	5·8
5	0·080	5·0	3·0	4·0
6	0·015	5·0	8·0	6·5
7	0·106	4·5	8·0	6·3
8	0·079	2·5	7·0	4·8
9	0·066	2·5	8·0	5·3
10	0·054	...	...	3·3
11	0·152	9·0	9·0	9·0
12	0·166	6·5	6·5	6·5
13	0·112	5·0	6·0	5·5
14	0·120	4·0	6·5	5·3
15	0·145	6·0	6·5	6·3
16	0·105	6·0	7·5	6·8
17	0·114	...	...	2·0
18	0·065	4·5	3·0	3·8
19	0·005	4·0	10·0	7·0
20	0·196	7·0	6·5	6·8
21	0·132	6·5	8·0	7·3
22	0·192	4·0	8·0	6·0
23	0·132	9·0	9·5	9·3
24	0·100	...	...	4·5
25	...	9·0	9·0	9·0
26	...	5·0	8·0	6·5
27	...	9·0	9·0	9·0
28	0·029	5·0	6·0	5·5
29	0·061	3·0	5·5	4·3
30	0·033	5·5	5·0	5·3
31	...	...	...	4·8
	Sum.			
Means	2·467	5·6	7·2	6·0

REMARKS.

1.—Cloudy, dull from 10 30 a.m. until after 1 p.m. S.S.W. squall and heavy shower 9·30 p.m., afterwards light steady rain until 10·40 p.m.
2.—Cloudy, very dull, and showery, from 4·15 a.m. Strong cold breeze during day.
3.—Cloudy. Very heavy rain all day until 10 p.m. without ceasing.
4.—Fine. Strong dry breeze. Forenoon cloudy from about 11 a.m. No clouds at 9 p.m.
5.—Fine. No clouds in the morning. Cloudy from noon until 6·30 p.m. Clouds were light.
6.—Cloudy, very dull, and cold. Very light drops of rain at 9 a.m., afterwards rained lightly during day until about 8 p.m. Fine at 8·30 p.m.
7.—Fine. Strong and very dry breeze until evening. No clouds in the evening; also hazy, and dew falling.
8.—Fine until 12·45 p.m., when it became cloudy and cleared again about 4 p.m. Evening hazy, and heavy dew falling. Observed meteor S.W. at 11·8 p.m., altitude 45°, color very bright, and lasted about 2 seconds.
9.—Fine, morning cold. Cloudy from 12·15 p.m. until between 4 p m. and 5 p.m. Dull, like rain at 2 p.m. No clouds at 9 p.m. Evening hazy and dew falling. Light shower in the night.
10.—Fine until 11 a.m., morning cold, and again from 9·30 p.m. until 10·15 p.m. Light clouds and cloudy during day after 11 a.m.
11.—Fine until 2·30 p.m. and again after 7·15 p.m. Thunderstorm W. at 2·40 p.m. until 3 45 p.m. Drops of rain 3·11 p.m. Violent squall 3·16 p.m. Raining heavily 3·23 p.m. Electrometer 90 during storm. Lightning N.W. at 3·13 p.m., and N.W., N., E., and E.S.E. during evening.
12.—Cloudy and fine alternately. Light rain from 9·25 a.m. until 9·30 a.m. Strong dry breeze during day. Evening cold.
13.—Cloudy and fine alternately. Fresh dry breeze during day. Evening cold.
14.—Cloudy and fine alternately. Evening cold.
15.—Cloudy and fine alternately. Strong dry breeze. Evening cold.
16.—Fine until 10·30 a.m., and again after 7·55 p.m. Forenoon and afternoon cloudy and dull. Atmosphere dry all day.
17.—Fine, fresh breeze; morning cold. Turned cloudy towards evening; the clouds were light and broken.
18.—Fine, almost calm; atmosphere dry. Evening hazy and dew falling.
19.—Cloudy and dull; raining lightly at intervals during day from 8·40 a.m. Calm.
20.—Morning cloudy, and raining lightly until 10 a.m., rest of day fine. Strong W. gale all forenoon and afternoon; also very dry atmosphere.
21.—Cloudy and fine alternately. Morning and evening cold.
22.—Fine. Morning and evening cold. Squally all forenoon and afternoon; also very dry atmosphere. Electrometer 50 at 3 p.m. Lightning S.E. at 9 p.m.
23.—Fine, cold; atmosphere very dry. Lightning E.S.E., S.E., and S. at 9·8 p.m.
24.—Fine, morning cold. Cloudy about 8 p.m.
25.—Cloudy and heavy showers. Rainbows at intervals.
26.—Forenoon cloudy and showery. Rainbow W.S.W. at 9·24 a.m. Fine from 3·30 p.m. until about 6 p.m. Light showers again at 6·55 p.m. and 8·34 p.m. Lunar ring after 8 p.m. about 30° diameter.
27.—Cloudy. Rained lightly nearly the whole day.
28.—Cloudy; forenoon showery. Clouds broken in the evening, and cleared about 8·45 p.m. Rainbow S.W. at 9·18 a.m.
29.—Forenoon fine and warm. Afternoon cloudy and fine alternately. Cloudy all evening.
30.—Cloudy until 8·45 p.m. Clouds began to clear at 8·30 p.m.
31.—Cloudy, dull, and raining, at times heavily. Evening showery; fine at 9 p.m.; cloudy again and raining at 9·45 p.m.

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·730	29·821	9 a.m.	29·663	5 a.m.	4	7	3	9	1	...	...	...	...	...	...	...	...	...	...	235	9·8	0·5	3·6	S.S.W.	8·10 a.m.
2	29·649	29·692	9 a.m.	29·591	5 a.m.	4	14	6	...	...	...	...	...	...	...	...	...	...	...	...	654	27·3	3·7	8·4	S.	4·33 a.m.
3	29·533	29·618	10 a.m.	29·448	5 & 6 a.m.	2	3	8	9	2	...	...	...	...	...	...	...	...	...	...	645	26·9	3·6	11·0	S.W.	4·5 p.m.
4	29·564	29·702	8 a.m.	29·472	3 p.m.	...	...	...	5	5	14	...	...	...	...	...	...	...	...	...	388	16·2	1·3	7·6	W.S.W.	11·34 a.m.
5	29·734	29·759	10&11 p.m.	29·706	3 p.m.	...	...	...	...	...	17	3	2	2	...	...	...	...	...	...	142	5·9	0·2	6·0	N.	4·53 p.m.
6	29·662	29·760	9 a.m.	29·613	3 p.m.	...	...	...	...	1	8	4	6	5	...	...	...	...	...	...	156	6·6	0·2	1·8	N.	8·31 p.m.
7	29·734	29·837	8 a.m.	29·647	2 p.m.	...	...	...	1	6	13	1	3	...	...	...	...	...	...	...	268	11·2	0·6	4·5	W.N.W.	2·58 p.m.
8	29·912	29·942	9,10,11,&12 p.m.	29·867	1 p.m.	...	6	1	2	10	5	...	...	...	...	...	...	...	...	...	176	7·3	0·3	2·2	W.	10·5 a.m.
9	.....	.....	.....	.....	.....	1	6	2	1	2	11	1	...	...	...	...	...	...	...	...	113	4·7	0·1	0·4	W.N.W.	9·26 a.m.
10	.....	.....	.....	.....	.....	...	...	...	...	...	4	...	...	6	11	3	...	...	...	...	279	11·6	0·7	2·2	N.N.E.	9·50 p.m.
11	29·598	29·688	9 a.m.	29·509	2 p.m.	...	...	...	...	2	3	7	7	4	1	...	...	...	...	...	342	14·2	1·0	14·0	W.	3·23 p.m.
12	29·629	29·656	9 a.m.	29·593	3 p.m.	...	...	...	1	5	16	2	...	...	...	...	...	...	...	...	407	17·3	1·4	3·9	W.	8·22 a.m.
13	29·734	29·769	8 a.m.	29·667	3 p.m.	...	...	...	4	20	...	...	...	...	...	...	...	...	...	...	450	18·7	1·8	6·1	W.	10·38 a.m.
14	29·762	29·796	9 a.m.	29·734	2, 3 & 4 p.m.	...	10	2	4	8	...	...	...	...	...	...	...	...	...	...	409	17·0	1·4	4·5	S.S.W.	10·45 a.m.
15	29·786	29·819	11 p.m. & 8 a.m.	29·744	3 p.m.	...	6	1	3	14	...	...	...	...	...	...	...	...	...	...	333	13·9	1·0	2·0	S.S.W.	12·5 p.m.
16	.....	.....	.....	.....	.....	...	7	2	11	4	...	...	...	...	...	...	...	...	...	...	397	16·5	1·4	2·2	S.S.W.	2·35 p.m.
17	.....	.....	.....	.....	.....	...	...	...	6	18	...	...	...	...	...	...	...	...	...	...	325	13·5	0·9	2·2	W.S.W.	12·20 p.m.
18	.....	.....	.....	.....	.....	...	...	...	...	7	12	...	...	2	3	...	...	...	...	...	124	5·2	0·1	1·0	W.	9·36 a.m.
19	29·680	29·834	9 a.m.	29·527	7 & 8 a.m.	...	...	...	4	7	5	1	2	5	...	...	...	...	...	...	205	8·5	0·4	2·0	N.	6·45 p.m.
20	29·603	29·732	7 & 8 a.m.	29·449	3 p.m.	...	...	...	1	19	2	2	...	...	...	...	...	...	...	...	567	23·6	2·8	18·6	W.	3·5 p.m.
21	29·669	29·787	9 a.m.	29·605	1 a.m.	...	...	...	...	3	7	8	6	...	...	...	...	...	...	...	311	13·0	0·9	3·9	N.W.	8·46 a.m.
22	29·699	29·884	8 a.m.	29·564	1 & 2 p.m.	...	...	...	...	19	4	1	...	...	...	...	...	...	...	...	594	24·7	3·1	18·6	W.	3·45 p.m.
23	29·978	30·028	8 a.m.	29·913	1 p.m.	...	...	...	1	23	...	...	...	...	...	...	...	...	...	...	453	18·9	1·8	6·8	W.	9·38 a.m.
24	30·051	30·232	8 a.m.	29·932	2 & 3 p.m.	...	...	2	20	2	...	...	...	...	...	...	...	...	...	...	455	18·9	1·8	5·1	W.S.W.	6·25 p.m.
25	30·297	30·356	8 a.m.	30·241	1 & 2 p.m.	...	5	3	4	10	...	...	...	1	...	...	...	...	1	...	205	8·5	0·4	1·6	S.S.W.	2·45 p.m.
26	30·336	30·368	11 a.m.	30·308	4 a.m.	6	...	...	...	10	6	...	...	...	...	...	...	...	...	2	114	4·7	0·1	1·0	S.S.W.	2·12 p.m.
27	30·265	30·353	10 a.m.	30·183	2 a.m.	1	4	4	3	8	4	...	...	...	...	...	...	...	...	...	162	6·7	0·2	1·0	W.	10·40 a.m.
28	30·085	30·190	9 a.m.	30·007	4 &5 a.m.	3	2	...	1	4	12	...	...	...	...	...	...	...	...	2	135	5·6	0·2	0·5	S.S.E.	2·30 p.m.
29	29·926	30·012	9 a.m.	29·854	5 a.m.	...	...	...	...	8	16	...	...	...	...	...	...	...	...	...	161	6.7	0·2	1·4	W.N.W.	7·8 a.m.
30	29·858	29·912	9 & 10 a.m.	29·832	2 p.m. & 4 a.m.	...	...	...	...	20	4	...	...	...	...	...	...	...	...	...	191	8·0	0·3	1·0	W.	2·16 p.m.
31	29·920	30·012	8 a.m.	29·856	2 p.m.	...	1	5	4	12	2	...	...	...	...	...	...	...	...	...	197	8·2	0·3	2·0	S.W.	5·30 p.m.
Sums or Means.	29·823	May 26th, 30·368 11 a.m.		May 3rd, 29·448 5 & 6 a.m.		21	71	39	94	250	165	30	26	25	15	3	...	...	1	...	4	9593	12·9	1·1			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of MAY, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., May, 1874.									For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·215	62·0	66·0	E.S.E.	...	...	71·2	52·7	83·3	41·2	0·100	1	0·100	6	3·107
Tenterfield ...	80	...	...	48·6	..	W.	0·9	2·3	62·6	34·5	71·0	25·0	0·320	1	0 320	11	...
Grafton	22	...	...	64·8	...	S.W.	0·5	3·8	83·5	46·0	91·0	38·0	0·270	2	0·220	11	5·017
Inverell	122	...	...	51·6	79·0	S.W.	0·3	2·1	66·0	37·2	73·0	25·0	0·550	2	0·380	7	...
Bourke	393	...	...	57·0	...	S.	1·5	1·8	69·0	44·9	79·0	37·0	No	rain	record	ed	...
Narrabri	196	...	...	56·0	...	S.W.	0·7	1·0	68·6	43·4	...	...	0·440	3	0·220	8	2·373
Armidale.....	80	3278	...	51·2	94·0	W.	1·5	4·3	61·7	40·7	73·0	29·0	0·320	3	0·120	*	2·736
Goonoo Goonoo	110	1550	...	52·5	...	W.	0·4	1·7	64·0	40·9	71·0	28·0	0·640	3	0·400	20	...
Port Macquarie	0	53	30·009	60·6	...	S.W.	1·6	3·0	69·1	52·1	75·9	40·9	0·710	7	0·340	11	2·074
Murrurundi ...	94	1545	...	52·4	...	.....	...	...	60·3	44·4	67·5	37·0	1·810	3	0·800	6	...
Cassilis	120	...	...	50·9	...	W.	0·5	1·1	61·7	40·1	72·0	32·0	1·030	4	0·480	20	1·858
Scone	78	...	...	55 1	...	W.	1·1	4·2	63·0	47·1	70·0	40·0	0·810	5	0·440	19	2·225
Muswellbrook..	68	...	...	57·2	...	N.	1·7	2·7	69·9	44·4	76·0	31·0	No	rain	record	ed	...
Dubbo	182	...	...	46·3	...	W.	1 5	1·1	62·2	30·4	71·0	24·0	2 020	4	1·270	20	2·089
Mudgee	121	...	...	...	...	W.	0·8	...	...	40·4	...	34·0	1·020	4	0·580	19	2·539
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	..	...	W.	1·7	5·4	...	42·5	...	36·0	1·770	6	0·750	4	3·065
Lambton	7	...	...	54·9	...	W.	1·5	...	64·2	45·6	75·0	40·0	4·550	8	1·850	4	2·201
Newcastle	1	112	30·007	59·9	75·0	W.	0·5	4·0	67·4	52·4	76·5	45·0	5·620	12	0·680	1	...
Orange.....	124	2891	...	47·6	...	S.	1·2	5·4	55·3	39·9	61·8	30·9	4·850	11	2·720	20	1·743
Bathurst	96	2200	30·045	51·3	88·0	W.	1·0	6·1	63·9	38·7	73·5	27·0	2·210	6	1·710	20	...
Forbes	176	...	30·178	52·2	...	N.N.E.	0·4	1·5	62·2	42·2	74·0	35·0	No	rain	record	ed	...
Kurrajong	36	1870	...	49·3	...	W.	2·1	4·5	54·5	44·0	60·5	38·5	2·580	8	0·360	26	...
Mount Victoria	61	3490	30·045	46·8	89·0	W.	0·1	6·0	54·0	39·5	62·8	30·0	0·980	12	0·300	20	1·843
Woodford	50	2192	29·917	52·6	...	W.	0·1	...	56·6	48·6	61·5	38·0	3·080	11	1·750	4	...
Parramatta.....	16	...	...	...	...	S.W.	1·1	3·4	...	59·9	...	51·3	0·040	1	0·040	7	...
South Reef	0	...	...	...	...	W.	1·3	5·3	...	...	...	...	12·060	13	5·260	4	...
Sydney.....	5	155	30·033	58·9	78·8	W.	1·1	4·9	64·6	53·1	71·1	47·6	8·623	15	3·920	4	2·467
Liverpool.....	16	...	29·995	53·7	...	W.	0·5	3·8	62·5	44·8	71·0	33·0	3·368	12	1·805	4	...
Wentworth.....	476	...	...	55·6	...	W.	1·4	3·3	64·9	46·2	76·5	41·0	1·550	6	0·460	11	2·775
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	2·860	6	1·100	3	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	4·510	9	1·730	4	...
Young	140	...	...	52·3	...	N.E.	0·5	5·6	62·1	42·5	74 0	35·0	3·340	7	1·440	20	1·994
Wollongong ...	0	...	...	58·9	...	S.W.	1·9	...	64·5	53·2	71·0	45·5	No	rain	record	ed	...
Moss Vale	31	...	...	48·7	...	W.	0·9	...	54·7	42·6	60·0	35·0	4·320	8	1·600	4	...
Goulburn.....	54	2129	30·068	51·6	88·0	W.	1·9	6·2	62·5	40·6	73·3	29·2	2·390	9	1·060	20	1·717
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	52·6	...	.....	...	...	60·3	44·9	72·0	34·0	2·630	6	1·320	7	2·906
Cape St. George	0	175	29·957	59·0	78·0	S.	1·7	5·9	64·0	54·0	71·0	45·0	5·710	12	1·240	4	...
Queanbeyan ...	60	...	...	49·4	...	N.N.W.	0·6	6·7	59·1	39·7	64·0	31·0	1·880	5	0·800	20	2·156
Urana	218	...	...	54·5	...	N.W.	1·8	4·0	63 7	45·3	76·0	38·0	3·230	6	1·080	7	2·402
Deniliquin	287	410	30·121	54·9	83·0	S.W.	1·2	3·1	68·6	41·1	81·0	34·0	1·890	7	0·520	7	...
Kandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cooma	52	2637	...	...	..	S.	1·2	7·1	...	33·3	...	25·5	0·510	5	0·170	4	1·097
Albury.....	175	572	30·047	...	90·0	N.W.	0·8	5·8	...	37·0	...	29·9	2·970	11	0·900	12	...
Eden.....	0	107	29·991	57 7	76·0	S.W.	1·7	5·0	63·4	52·0	68·0	47·0	3·600	18	1·050	31	...

* 12th and 21st.

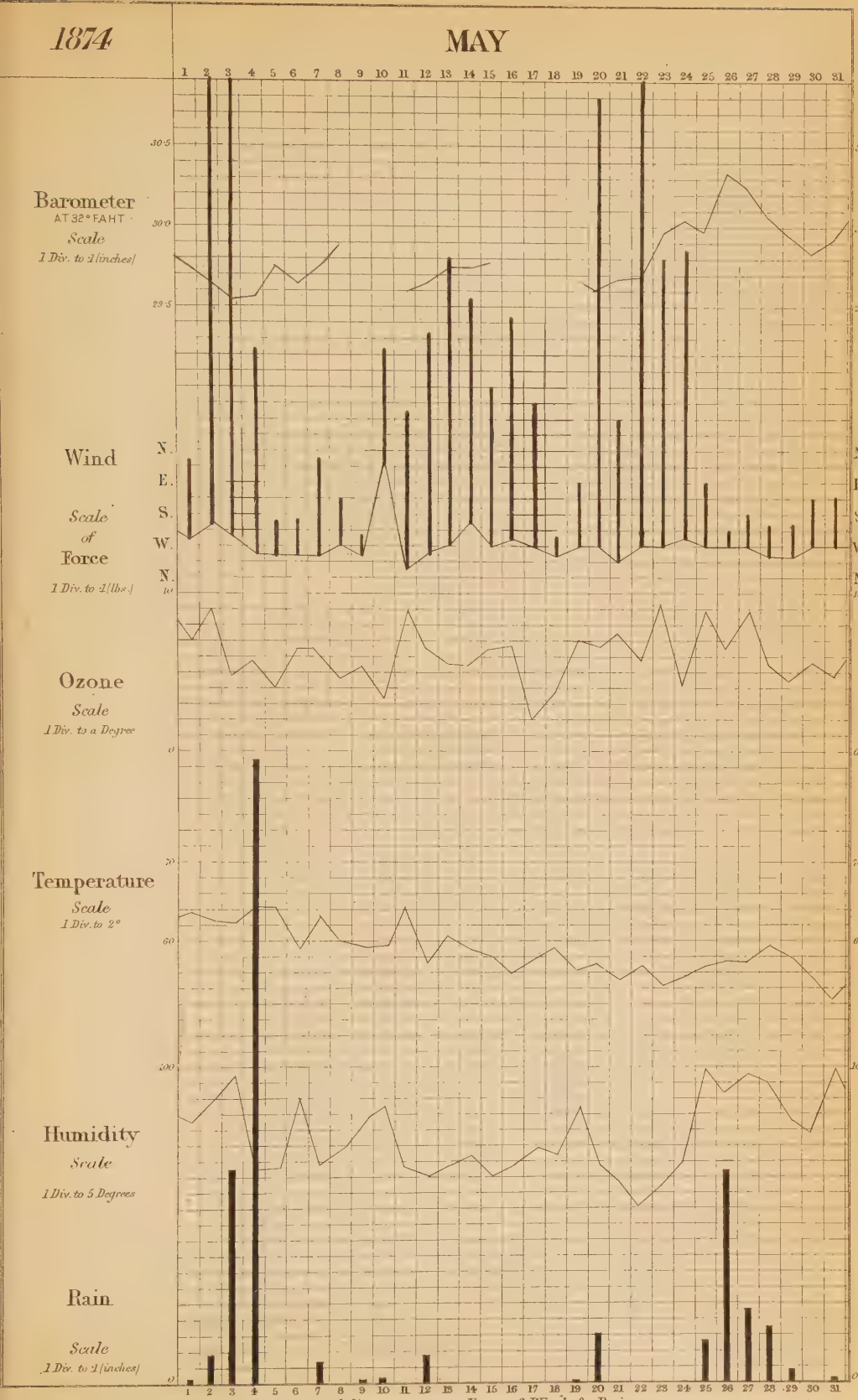
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Showery on 5th; boisterous on 13th, 22nd, and 31st.
Inverell—Showery on 6th; lightning, 11th.
Bourke—Showery on 5th; boisterous, 11th; thunderstorm, 19th; squally, on 22nd.
Narrabri—Light showers, 6th; foggy, 7th and 12th; frosty, 13th, 14th, 21st, 23rd, 24th, 30th, and 31st.
Armidale—Frosty, 14th, 15th, 16th, and 18th; Raining on 20th.
Goonoo Goonoo—Squall from W. on 11th; high wind on night of 19th; rain, on the morning of 20th.
Port Macquarie—Thunderstorms, 10th and 11th; lightning, 12th, 15th, 18th, 28th, and 31st; squally, 2nd and 15th; rain, 6th, 10th, 11th, 26th, 27th, and 28th; meteor observed, 20th.
Murrurundi—Rain on 5th, 18th, and 29th.
Cassilis—Heavy thunderstorm, 11th; rain, 5th, 6th, 11th, and 19th.
Scone—Heavy dew, 1st, 14th, and 29th; Rain, 2nd, 5th, 10th, 18th, and 24th; frost, 7th, 15th, and 30th; severe frost, 8th; thunderstorm, 11th.
Muswellbrook—Foggy, 26th, 30th, and 31st.
Dubbo—Rain, 5th, 6th, 12th, and 19th; thunderstorm, 12th; foggy, 15th; frosty, 21st.
Mudgee—Rain, 6th, 12th, and 19th; foggy, 27th, and 29th; frosty, 30th.
West Maitland—Rain, 2nd, 6th, 20th, 27th, 28th, and 29th.
Lambton—Rain, 2nd, 3rd, 4th, 11th, 25th, 26th, and 27th; lightning, 10th, 11th, 12th, 15th, and 25th; thunderstorm, 11th.
Newcastle—Rain, 20th; showery, 25th and 28th; heavy sea, 2nd, 3rd, 4th, 15th, and 25th.
Orange—Frosty, 9th, 15th, 16th, 17th, and 18th; rain, 4th, 5th, 6th, 7th, 12th, 19th, 20th, 21st, and 22nd; thunderstorm, 11th; foggy, 31st.
Bathurst—Rain, 3rd, 6th, 11th, 12th, 19th, 20th, and 22nd; foggy, 9th, 15th, 16th. 27th, and 28th; frosty, 16th, 18th, and 30th; heavy W. gale, 11th; lightning, 11th.
Forbes—Rain, 6th, 7th, 19th, and 20th; frost, 25th.
Kurrajong—Boisterous, 3rd, and 22nd; rain, 3rd, 6th, 11th, 19th, 26th, 27th, 28th, and 31st; violent thunderstorm, 11th.
Mount Victoria—Rain, 2nd, 5th, 6th, 7th, 19th, 20th, 21st, 22nd, 25th, 26th, 27th, 28th, and 30th; violent thunderstorm, 11th; foggy, 26th and 28th.
Woodford—Rain, 6th, 20th, 26th, 28th, and 31st; thunderstorm, 11th; westerly gales, 12th, 20th, and 22nd.
Parramatta—Rain, 3rd, 11th, 20th, 27th, and 31st; thunderstorm, 11th, with lightning.
South Reef—Rain, 1st, 2nd, 3rd, 6th, 11th, 19th, 25th, 26th, 27th, 28th, and 31st; gales, 2nd, 3rd, 20th, 22nd, and 23rd; thunderstorm, 11th.
Sydney—Rain, 1st, 2nd, 3rd, 4th, 7th, 10th, 12th, 19th, 20th, 25th, 26th, 27th, 28th, 29th, and 31st.
Liverpool—Rain, 3rd, 6th, 11th, 19th, 20th, 25th, 27th, and 31st; dew on 7th, 14th, 17th, 18th, and 19th; thunderstorm, 11th; lightning, 10th, 11th, and 30th; frost on 16th; foggy, 7th and 11th.
Wentworth—Rain, 5th, 6th, 10th, 11th, 19th, and 21st; thunstorm, 11th, 12th, and 20th; dew, 24th, 27th, 28th, 29th, and 31st; lightning, 20th; hurricane, 11th.
Wilton—Rain, 1st, 2nd, 10th, 18th, 24th, and 26th; thunderstorm, 11th.
Cordeaux River—Rain, 1st, 2nd, 3rd, 6th, 11th, 19th, 25th, 27th, and 30th; thunderstorm, 8th; gales, 11th and 22nd.
Young—Rain, 6th, 7th, 8th, 12th, 20th, 22nd, and 31st; foggy, 8th and 14th; frost on 15th.
Moss Vale—Rain, 2nd, 3rd, 7th, 11th, 19th, 24th, 25th, and 30th; thunderstorm with hailstones, 11th; dew on 9th; gale, 20th; foggy, 28th and 29th.
Goulburn—Rain, 3rd, 5th, 6th, 11th, 19th, 21st, 22nd, 26th, and 30th; thunderstorm, 11th; frost, 9th, 16th, 18th, and 30th; foggy, 26th.
Wagga Wagga—Rain 5th, 6th, 11th, 19th, 21st, and 30th; foggy, 2nd, 14th, 15th, and 29th; Observer reports calm during whole of month.
Cape St. George—Rain, 1st, 2nd, 3rd, 11th, 19th, 24th, 25th, 27th, 28th, 29th, 30th; thunderstorm, 11th; lightning, 11th, 20th, 23rd, and 30th; S. gale, 4th.
Queanbeyan—Rain, 5th, 6th, 11th, 19th, and 22nd; thunderstorm, 11th.
Urana—Rain, 5th, 6th, 10th, 11th, 19th, and 21st; lunar eclipse, 1st.
Deniliquin—Rain, 5th, 6th, 10th, 11th, 17th, 19th, and 21st; thunderstorm with lightning, 6th; dew, 1st, 2nd, 5th, and 9th; frost, 15th, 16th, 26th, and 27th.
Cooma—Rain, 3rd, 6th, 11th, 21st, and 29th; foggy, 1st, 27th, and 28th; frosty, 8th, 9th, 10th, 11th, 12th, 13th, 14th, and 15th.
Albury—Rain, 5th, 6th, 7th, 8th, 11th, 12th, 19th, 20th, 21st, 22nd, and 29th; frosty, 16th; thunder, 19th; foggy, 19th, 25th, 27th, and 28th; squally, 20th and 22nd; gale, 21st.
Eden—Rain, 1st, 2nd, 3rd, 4th, 6th, 7th, 8th, 11th, 12th, 13th, 14th, 15th, 19th, 20th, 22nd, 24th, 25th, and 30th; thunder, 7th and 10th; lightning, 6th, 8th, 9th, 20th, 21st, and 22nd; very heavy sea, 4th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney

Force of Wind 2nd 3.7lbs 6th 3.6lbs & 22nd 3.1lbs Dew 9th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS.

FOR THE

MONTH OF JUNE, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[*Price 6d*] 3*u* 28—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

JUNE, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·262 inches	on the 2nd.
	Lowest Reading	29·309 ,,	on the 20th.
	Mean Height	29·902	

(Being 0·024 in. less than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure... ...	20·5 lbs.	On the 8th.
	Mean Pressure	0·8 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 15 years W.)

TEMPERATURE	Highest in the Shade ...	68·1	... On the 7th.
	Lowest in the Shade ...	41·0	... On the 30th.
	Greatest Range	19·7	... On the 18th.
	Highest in the Sun ...	99·6	... On the 6th.
	Highest in Black Box with Glass Top	130·0	... On the 2nd.
	Lowest on the Grass ...	36·4	... On the 18th.
	Mean Diurnal Range ...	12·4	
	Mean in the Shade ...	53·2	

(Being 1·6 less than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 10th, 11th, 12th, 26th, 27th, and 28th.
	Least	51·0	... On the 8th.
	Mean	80·8	

(Being 4·1 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	12 rain and 6 dew.	
	Greatest Fall	2·005 inches.	On the 27th.
	Total Fall	6·798 inches.	65 feet above ground.
		9·226 inches.	15 inches above ground.

(Being 3·705 inches greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	1·672 inch.
OZONE	Mean Amount	6·0

(Being 0·7 greater than that in the same month on an average of the preceding 15 years.)

ELECTRICITY ..	Number of Days Lightning	6
CLOUDY SKY ..	Mean Amount	4·1
	Number of Clear Days ...	7
METEORS ..	Number Observed ...	1

REMARKS.

The weather during the month was unusually cold, snow fell at five of the stations and was so heavy at Kiandra that it was many feet thick on the ground. Frosts were very frequent, and cold westerly winds prevalent over the Colony. The rainfall north of Newcastle was light, but to south and especially along the coast it was heavy.

SYDNEY, JUNE, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0-100.	Rain. Inches.	Cloudy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9,3, & 9.
1		30·234	W.	288	53·5	50·4	59·0	47·6	11·4	53·3	92·3	42·5	65·7	80·3	0·968	0·7
2	G. S. Dec.	·444	W.N.W.	125	52·7	50·0	61·6	45·2	16·4	53·4	97·6	10·5	65·1	83·7	·0	0·0
3		·432	W.N.W.	134	51·7	49·2	61·1	43·8	17·3	52·5	97·8	38·5	64·9	83·7	0·009	0·7
4		·424	W.	122	51·7	50·3	61·0	44·8	16·2	52·9	98·1	39·8	64·1	90·3	0·005	1·0
5		·396	W.N.W.	138	52·7	50·5	60·2	43·0	17·2	51·6	96·8	38·6	63·8	86·3	0·010	1·0
6		·308	N.	223	56·7	52·8	66·2	45·6	10·6	55·9	99·6	42·0	63·6	77·7	0·007	4·3
7	Last Qr.	·061	N.W.	335	58·1	53·5	68·1	54·1	14·0	61·1	96·6	44·7	63·1	72·0	0·002	10·0
8		·028	W.	471	55·0	48·8	61·8	50·6	11·2	56·2	96·0	39·0	63·3	64·0	·0	0·0
9	In Equat.	·277	W.	378	50·1	47·4	57·0	45·7	11·3	51·4	87·6	39·5	63·2	81·7	·0	7·0
10		·264	W.	263	52·4	52·0	56·7	48·0	8·7	52·4	86·8	45·5	63·0	97·0	1·510	10·0
11	Perigee.	·123	W.	151	54·3	54·1	57·4	50·1	7·3	53·8	65·6	48·5	62·7	98·7	1·995	10·0
12		·062	N.W.	150	55·8	55·1	60·3	52·6	7·7	56·5	85·6	50·5	62·3	95·3	1·132	9·0
13		29·796	N.W.	412	53·7	48·7	58·2	51·8	6·4	55·0	93·1	46·0	62·1	69·0	0·085	0·0
14	New Moon.	·580	N.W.	557	51·1	47·0	58·1	47·9	10·2	53·0	92·2	42·5	62·0	73·0	·0	10·0
15	G. N. Dec.	·882	W.	388	52·3	46·8	57·1	49·3	7·8	53·2	82·7	44·4	61·9	66·0	·0	4·0
16		30·151	W.	225	49·3	46·4	58·0	41·4	16·6	49·7	94·3	37·5	61·3	80·7	·0	0·3
17		·277	W.	161	49·1	45·7	58·6	41·6	17·0	50·1	94·7	36·8	61·1	78·0	·0	0·0
18		·281	W.	119	49·9	47·0	60·8	41·1	19·7	51·0	95·2	36·4	60·5	81·0	0·001	0·2
19		·208	W.	152	53·2	48·3	61·9	42·7	19·2	52·3	97·6	36·9	60·1	71·7	0·001	0·4
20		29·855	N.N.W.	443	55·2	51·7	60·1	45·6	14·5	52·9	80·8	40·5	60·3	77·0	0·011	7·0
21		·633	W.N.W.	593	52·0	46·0	57·6	50·0	7·6	53·8	92·6	42·6	60·1	63·0	0·005	0·0
22	In Equat. / First Qr.	·817	W.N.W.	375	54·7	48·6	60·4	50·8	9·6	55·6	94·6	40·9	60·3	63·7	·0	0·0
23	Apogee.	30·072	W.	271	53·9	48·6	61·6	48·5	13·1	55·1	95·0	38·0	59·7	68·0	·0	0·7
24		·056	W.	433	50·5	48·1	56·7	43·1	13·6	49·9	90·4	36·7	59·5	83·3	·0	10·0
25		·133	W.N.W.	402	49·8	47·6	55·2	47·9	7·3	51·6	90·4	42·5	59·1	84·7	0·290	4·7
26		·072	W.N.W.	196	49·1	49·1	51·2	45·2	6·0	48·2	65·9	40·5	59·3	100·0	0·725	10·0
27		·136	N.W.	81	53·7	52·8	61·0	47·9	13·1	54·5	92·9	45·8	59·1	94·0	2·005	8·0
28		·058	N.W.	238	49·8	49·8	61·7	48·9	12·8	55·0	97·6	40·3	58·0	100·0	0·505	7·0
29		·129	W.N.W.	287	52·7	48·6	59·7	48·7	11·0	54·2	94·1	43·1	58·5	74·3	·0	0·0
30	G. S. Dec. / Full Moon.	·291	W.	64	49·3	47·3	57·4	41·0	16·4	49·2	94·0	36·5	58·4	86·0	·0	7·0
Means	.....	30·116	W.	8175	52·5	49·4	59·5	46·8	12·4	53·2	91·3	41·3	61·5	80·8	Sum. 9·266	4·1

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·029 above the true mean for the day.

Heavy dew, 3rd, 4th, 5th, 6th, 18th, and 19th.

SYDNEY, JUNE, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.
1	0·087	7·0	8·0	7·5
2	0·034	2·5	3·0	2·8
3	0·038	0·0	6·0	3·0
4	0·038	0·0	2·5	1·3
5	0·030	3·0	3·0	3·0
6	0·036	6·0	6·5	6·3
7	0·074	...	...	3·0
8	0·140	6·5	8·5	7·5
9	...	10·0	10·0	10·0
10	...	8·5	8·5	8·5
11	...	7·0	9·0	8·0
12	0·024	6·0	7·0	6·5
13	0·120	5·0	6·0	5·5
14	0·120	...	...	3·0
15	0·096	5·5	7·0	6·3
16	0·049	3·0	7·5	5·3
17	0·042	6·5	3·0	4·8
18	0·029	2·0	4·0	3·0
19	0·024	5·0	6·0	5·5
20	0·066	8·5	8·0	8·3
21	0·159	...	...	4·0
22	0·109	6·5	8·5	7·5
23	0·077	5·0	8·0	6·5
24	0·033	9·5	9·5	9·5
25	0·039	8·5	10·0	9·3
26	...	9·5	10·0	9·8
27	0·009	7·0	9·0	8·0
28	0·072	...	...	4·0
29	0·100	8·5	8·0	8·3
30	0·027	3·0	2·5	2·8
31				
Sum.				
Means	1·672	5·8	6·9	6·0

REMARKS.

1.—Cloudy, from 9·45 a.m. until about 10·30 a.m., and cloudy and fine alternately from 5 p.m. until 7·30 p.m., when it finally cleared. Morning and evening cold.
2.—Fine. Morning very cold. Evening very hazy, and heavy dew falling; no clouds.
3.—Morning very cold. Very light clouds and cloudy from 11 a.m. until after 1 p.m. Afternoon and evening very hazy, and heavy dew falling.
4.—Cloudy and fine alternately; clouds were light. Final clearing after 6 p.m.
5.—Fine until noon, morning very cold. Cloudy and fine alternately from noon until 6 p.m., and afterwards fine
6.—Cloudy until after 1 p.m. Morning cold.
7.—Cloudy until about noon; towards evening turned cloudy again and cleared at 5·30 p.m. Light rain from 8·50 a.m. until about 9 10 a.m.
8.—Fine. Strong cold breeze. Atmosphere very dry.
9.—Cloudy and fine alternately until about 12·30 p.m., rest of day cloudy. Heavy showers from 3·25 p.m., light shower, 1·55 p.m. S. gale at 3 p.m.
10.—Cloudy and showery. Fine from 10·15 p.m. until 10·55 p.m. Rainbows frequent during morning.
11.—Cloudy and showery; very heavy showers in forenoon.
12.—Cloudy, with partial clearing at intervals. Showery all forenoon and afternoon from 11·50 a.m. Rainbows S. at noon, and S.E. at 1·47 p.m. Lightning, N.N.E. at 9·18 p.m.
13.—Fine. Strong cold dry breeze.
14.—Cloudy and dull. Afternoon squally and dropping rain at 2·25 p.m.; towards evening clouds cleared. Evening very cold.
15.—Morning fine until 9·25 a.m., and again after 2 p.m. Evening cold. Lightning E.N.E at 9·57 p.m.
16.—Fine. Cold. Evening hazy, and dew falling. Meteor observed W. at 9·16 p.m., 2′ magnitude and falling towards horizon. Lightning N.E. at 7·30 p.m.
17.—Fine. Almost calm at 3 p.m.; no clouds in evening, and dew falling.
18.—Forenoon fine; afternoon cloudy until about 4 p.m. Evening fine; also cold, hazy, and heavy dew falling.
19.—Morning fine and cold. Light clouds from 1·30 p.m. until about 2·30 p.m., and turned cloudy again after 7 p.m.
20.—Cloudy and dull; light rain early in morning and at 9·22 a.m., also at noon and from 12·50 p.m. until 1·20 p.m. Fine from 2·45 p.m. until 9·20 p.m. Lightning E. at 8·30 p.m.
21.—Fine until 2·30 p.m., and cleared again between 3 p.m. and 4 p.m.
22.—Fine, fresh breeze; atmosphere very dry.
23.—Fine; atmosphere dry. Evening cold.
24.—Morning fine until 8·45 a.m., afterwards cloudy. Raining lightly from 1 p.m. until about 7 p.m. Partial clearing of clouds in evening. Fine about 11 p.m. Lunar halo at 9 p.m.
25.—Cloudy until 11·20 a.m., and again after 10 p.m. Forenoon showery. Rainbow S. at 8·50 a.m. Lightning W. at 8·45 p.m.
26.—Cloudy and dull. Thunderstorm and very heavy rain at 3·30 a.m. from W.S.W.; rained heavily during forenoon except for short intervals. Thunder W. at 11·13 a.m., also at 11·52 a.m. with lightning. Rainbow S.W. at 9 a.m.
27.—Cloudy and showery until evening. Evening fine from 5·30 p.m. until 8·15 p.m. Very hazy at 9 p.m., and dew falling. Rainbow at 9 a.m.
28.—Cloudy and fine alternately. Lightning S.E at 6·42 p.m. and during evening.
29.—Fine, calm at 9 a.m. Atmosphere dry in evening also cold.
30.—Fine until after 11 a.m., when lights clouds formed. Afternoon and evening dull from 2·15 p.m. Calm at 9 p.m., also hazy and dew falling.

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.
Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

JUNE, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	30·134	30·252	8 a.m.	30·042	9 a.m.	...	6	3	3	10	2	...	...	...	...	...	...	...	...	...	...	288	12·0	0·7	3·1 W. 12·45 p.m.
2	30·212	30·262	10 a.m.	30·177	5 a.m.	...	...	...	...	5	17	2	...	...	...	...	...	...	...	...	...	125	5·2	0·1	0·7 W.N.W. 3·20 a.m.
3	30·208	30·254	10 & 11 a.m.	30·144	2 p.m.	...	...	...	...	10	14	...	...	...	...	...	...	...	...	...	...	134	5·6	0·2	1·1 W.N.W. 11·35 a.m.
4	30·178	30·239	9 a.m.	30·142	2 p.m.	...	...	...	...	15	9	...	...	...	...	...	...	...	...	...	...	122	5·1	0·1	1·0 W. 8·40 a.m.
5	30·132	30·210	9 & 10 a.m.	30·103	2 & 4 a.m.	...	...	...	...	2	16	...	...	2	3	1	...	...	...	...	...	138	5·8	0·2	0·8 N. 7·43 p.m.
6	29·983	30·121	9 a.m.	29·893	5, 6 & 7 a.m.	...	...	...	...	...	4	2	4	12	2	...	...	...	...	...	...	223	9·3	0·4	1·8 N. 8·10 p.m.
7	29·806	29·893	10 a.m.	29·745	2 p.m.	...	...	...	...	...	10	10	4	...	...	...	...	...	...	...	...	335	14·0	1·0	4·2 N.W. 1·20 p.m.
8	29·918	30·038	8 a.m.	29·783	1 p.m.	...	...	...	3	19	2	...	...	...	...	...	...	...	...	...	...	471	19·7	1·9	20·5 W. 11·15 a.m.
9	30·073	30·198	7 p.m.	30·031	3 p.m.	...	4	4	4	8	4	...	...	...	...	...	...	...	...	...	...	378	15·7	1·2	10·1 S.S.W. 2·42 p.m.
10	29·969	30·075	9 a.m.	29·911	4 a.m.	...	8	1	3	10	1	1	...	...	...	...	...	...	...	...	...	263	11·0	0·6	2·6 S.S.W. 2·35 p.m.
11	29·876	29·934	10 a.m.	29·849	2 p.m.	2	1	2	1	12	3	...	...	1	...	...	...	...	...	2	...	151	6·3	0·2	1·4 S.S.W. 2·5 p.m.
12	29·660	29·879	9 a.m.	29·568	5 a.m.	1	2	...	...	3	1	4	1	1	2	...	4	...	4	...	1	150	6·3	0·2	1·4 N.W. 2·2 a.m.
13	29·491	29·615	9 a.m.	29·401	12 p.m.	...	...	...	...	...	5	13	6	...	...	...	...	...	...	...	...	412	17·2	1·5	4·8 W.N.W. 2·20 p.m.
14	29·550	29·677	8 a.m.	29·390	9 a.m.	...	...	...	9	...	...	15	...	...	...	...	...	...	...	...	...	557	23·2	2·7	10·1 W.S.W. 2·10 p.m.
15	29·805	29·936	8 a.m.	29·692	9 a.m.	...	5	3	6	10	...	...	...	...	...	...	...	...	...	...	...	388	16·2	1·3	2·6 S.W. 12·30 a.m.
16	29·915	30·030	8 a.m.	29·885	2 p.m.	...	5	1	1	10	7	...	...	...	...	...	...	...	...	...	...	225	9·3	0·4	0·8 W. 10 a.m.
17	30·061	30·089	10 p.m.	30·019	2 & 3 p.m.	...	...	...	...	14	10	...	...	...	...	...	...	...	...	...	...	161	6·7	0·2	0·8 W.N.W. 10·35 a.m.
18	30·020	30·094	10 a.m.	29·989	5 p.m.	...	...	...	...	23	1	...	...	...	...	...	...	...	...	...	...	119	5·0	0·1	0·4 W.N.W. 10·45 a.m.
19	29·877	30·019	10 a.m.	29·734	8 a.m.	...	...	...	...	9	4	2	4	5	...	...	...	...	...	...	...	152	6·3	0·2	1·3 N.N.W. 7·40 p.m.
20	29·444	29·676	9 a.m.	29·309	2 p.m.	...	...	...	...	1	...	7	9	6	1	...	...	...	...	...	...	443	18·4	1·7	5·1 W.N.W. 1·45 a.m.
21	29·498	29·577	7 & 8 a.m.	29·427	2 p.m.	...	...	...	...	3	18	2	1	...	...	...	...	...	...	...	...	593	24·7	3·1	14·6 W.N.W. 12 a.m.
22	29·720	29·853	8 a.m.	29·523	12 a.m.	...	...	...	...	7	15	2	...	...	...	...	...	...	...	...	...	375	15·7	1·2	5·1 W.N.W. 1·45 p.m.
23	29·871	29·887	10 & 11 p.m.	29·834	3 p.m.	...	...	...	...	13	11	...	...	...	...	...	...	...	...	...	...	271	11·3	0·6	4·2 W.N.W. 12·15 a.m.
24	29·880	29·941	8 a.m.	29·803	3 p.m.	...	...	...	3	13	8	...	...	...	...	...	...	...	...	...	...	433	18·0	1·6	5·1 W.S.W. 10·45 p.m.
25	29·940	30·043	9 a.m.	29·862	6 a.m.	...	...	...	3	7	11	3	...	...	...	...	...	...	...	...	...	402	16·8	1·4	6·5 W. 12·15 a.m.
26	29·882	29·922	8 a.m.	29·849	3 p.m.	...	...	...	1	3	20	...	...	...	...	...	...	...	...	...	...	196	8·2	0·3	1·3 W.N.W. 3 .m
27	29·864	29·949	9 a.m.	29·810	4 a.m.	...	...	...	...	...	1	6	6	2	3	3	2	1	...	...	...	81	3·4	0·1	0·5 N.N.E. 12·15 p.m.
28	29·858	29·933	8 a.m.	29·803	11 p.m.	...	...	...	...	2	4	10	4	4	...	...	...	...	...	...	...	238	9·9	0·5	1·6 N. 7·45 p.m.
29	29·981	30·073	8 a.m.	29·898	1 p.m.	...	...	...	3	9	11	...	1	...	...	...	...	...	...	...	...	287	12·0	0·7	3·9 W.N.W. 1·30 p.m.
30	30·265	30·107	10 a.m.	29·947	5 a.m.	...	..	...	1	13	10	...	...	...	...	...	...	...	...	...	...	64	2·7	0·0	1·0 W.N.W. 9·45 a.m.
Sums or Means.	29·902	June 2nd. 30·262	10 a.m.	June 20th. 29 309	2 p.m.	3	31	14	41	231	219	79	40	33	11	4	6	1	4	2	1	8175	11·4	0·8	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of JUNE, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., June, 1874.										For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction	Force. 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Tenterfield ...	80	...	...	43·9	..	E.	0·7	3·9	57·9	29·9	63·0	21·0	0·330	4	0·015	15	...
Grafton	22	...	...	53·9	...	S.W.	1·0	2·8	75·5	32·2	80·0	27·0	0·510	3	0·027	11	...
Inverell	122	...	...	46·0	84·0	S.W.	0·6	3·8	59·3	32·7	64·0	25·0	1·890	8	0·550	12	...
Bourke	393	...	...	50·9	...	S.	0·1	2·8	61·5	40·2	76·0	32·9	0·740	3	0·480	11	...
Narrabri	196	...	...	51·2	...	S.E.	0·8	2·7	62·1	40·3	71·2	31·9	1·060	5	0·045	21	1·699
Armidale.....	80	3278	...	45·0	81·0	W.	1·5	4·1	57·5	32·4	66·0	20·0	0·700	7	0·250	24	2·702
Goonoo Goonoo	110	1550	...	46·8	84·0	W.	0·6	4·8	58·4	35·1	64·0	19·0	0·950	6	0·490	21	...
Port Macquarie	0	53	30·052	55·7	...	S.W.	1·7	2·7	64·3	47·0	69·6	36·8	2·470	7	1·200	1	4·394
Murrurundi ...	94	1545	...	46·4	...	S.W.	1·0	3·0	54·2	38·5	58·0	29·0	1·980	4	1·200	21	...
Cassilis	120	...	...	45·8	...	W.	...	1·3	56·7	34·9	65·0	24·0	1·480	5	0·460	12	...
Scone	78	...	...	48·5	...	W.	1·0	3·2	57·1	39·9	61·0	30·0	1·210	5	0·400	21	2·211
Muswellbrook..	68	...	...	49·0	...	N.W.	1·3	3·0	62·5	35·5	66·8	26·0	...	...	...	...	...
Dubbo	182	...	...	40·5	...	W.	1·5	2·3	56·1	24·9	59·8	20·0	1·150	7	0·380	21	1·288
Mudgee	121	...	...	...	...	S.	0·3	...	...	33·4	...	28·0	2·200	7	0·900	21	1·484
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	47·6	...	W.	1·7	2·7	56·7	38·4	64·2	24·0	2·900	6	1·580	1	3·659
Lambton	7	...	...	48·2	...	W.	1·4	...	58·2	38·1	64·0	31·0	7·500	8	3·100	11	2·076
Newcastle	1	112	30·090	53·5	78·0	W.N.W.	0·5	2·5	52·1	48·9	59·5	44·0	7·510	12	0·950	27	...
Orange.....	124	2891	...	41·8	...	S.E.	1·1	5·5	49·6	34·0	55·0	22·2	4·770	14	1·240	21	4·632
Bathurst	96	2200	30·166	43·6	75·0	W.	0·7	4·8	56·4	30·7	65·0	22·0	1·410	5	0·550	22	...
Forbes	176	...	30·264	46·5	...	N.E.	0·3	4·0	55·4	37·6	62·0	30·0	...	...	...	...	...
Kurrajong	36	1870	...	44·0	...	W.	2·1	3·9	49·3	38·6	40·0	33·5	2·090	6	0·950	26	...
Mount Victoria	61	3490	30·156	41·5	90·0	W.	0·1	6·2	48·8	34·1	58·0	26·8	0·880	8	0·200	*	1·363
Woodford	50	2192	29·976	46·9	...	W.	1·8	...	50·7	43·1	59·5	38·8	4·010	8	1·370	27	...
Parramatta.....	16	...	...	51·7	...	W.	0·7	1·6	59·3	44·1	69·5	36·5	1·990	3	1·600	27	...
South Reef	0	...	...	...	...	W.	1·6	5·0	...	...	...	...	13·030	11	3·320	27	...
Sydney.....	5	155	30·116	53·2	80·8	W.	0·8	4·1	59·5	46·8	68·1	41·0	9·266	12	2·005	27	...
Liverpool.....	16	...	30·061	46·5	...	.....	...	2·7	55 8	37·1	62·0	31·0	3·936	12	1·350	27	...
Wentworth.....	476	...	...	50·7	...	S.W.	1·5	6·0	58·4	42·9	67·1	35·8	1·140	11	0·240	20	1·630
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	3·800	9	2·100	26	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	7·310	10	3·560	27	...
Young	140	...	...	46·8	...	N.W.	0·5	4·2	56 5	37·1	62 0	30·0	3·680	9	0·900	21	...
Wollongong ...	0	...	...	52·4	...	W.	1·5	...	58·6	46·1	68·0	42·0	...	3	...	...	...
Moss Vale	31	...	...	42·4	...	W.	1·3	...	48·8	36·0	56·0	28·0	4·010	11	1·450	27	...
Goulburn.....	54	2129	30·191	42·8	91·0	S.S.E.	0·0	8·2	55·2	30·3	63·0	20·9	1·480	10	0·520	13	2·067
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	46·3	...	N.	...	...	54·8	37·7	61·0	30·0	2·880	10	0·750	13	1·948
Cape St. George	0	175	30·026	52·5	75·0	W.	1·9	5·8	57·9	47·0	68·0	41·0	4·080	13	0·870	25	...
Queanbeyan ...	60	...	...	34·1	...	N.W.	0·3	4·5	36·6	31·5	43·0	25·0	2·120	6	0·650	13	1·119
Urana	218	...	...	49·0	...	N.E.	1·5	3·7	58·1	39·8	64·0	32·5	2·030	8	0·720	13	1·754
Deniliquin	287	410	30·213	47·8	98·0	S.W.	1·3	2·4	59·6	36·0	68·0	29·0	1·910	5	0·710	8	...
Kiandra	88	4640	...	...	..	.....	...	...	...	...	...	...	...	...	...	...	...
Albury	175	572	30·145	44·2	87·0	N.	0·6	5·3	56·9	31·4	61·9	22·0	3·380	7	0·920	29	...
Cooma	52	2637	...	39·7	...	S.	0·7	5·4	51·7	27·6	60·0	18 5	0·720	7	0·470	13	2·040
Eden.....	0	107	30·064	52·0	81·0	S.W.	1·5	5·6	57·7	46·2	67·0	39·0	5·890	16	2·300	14	...

* 11th, 13th, and 27th.

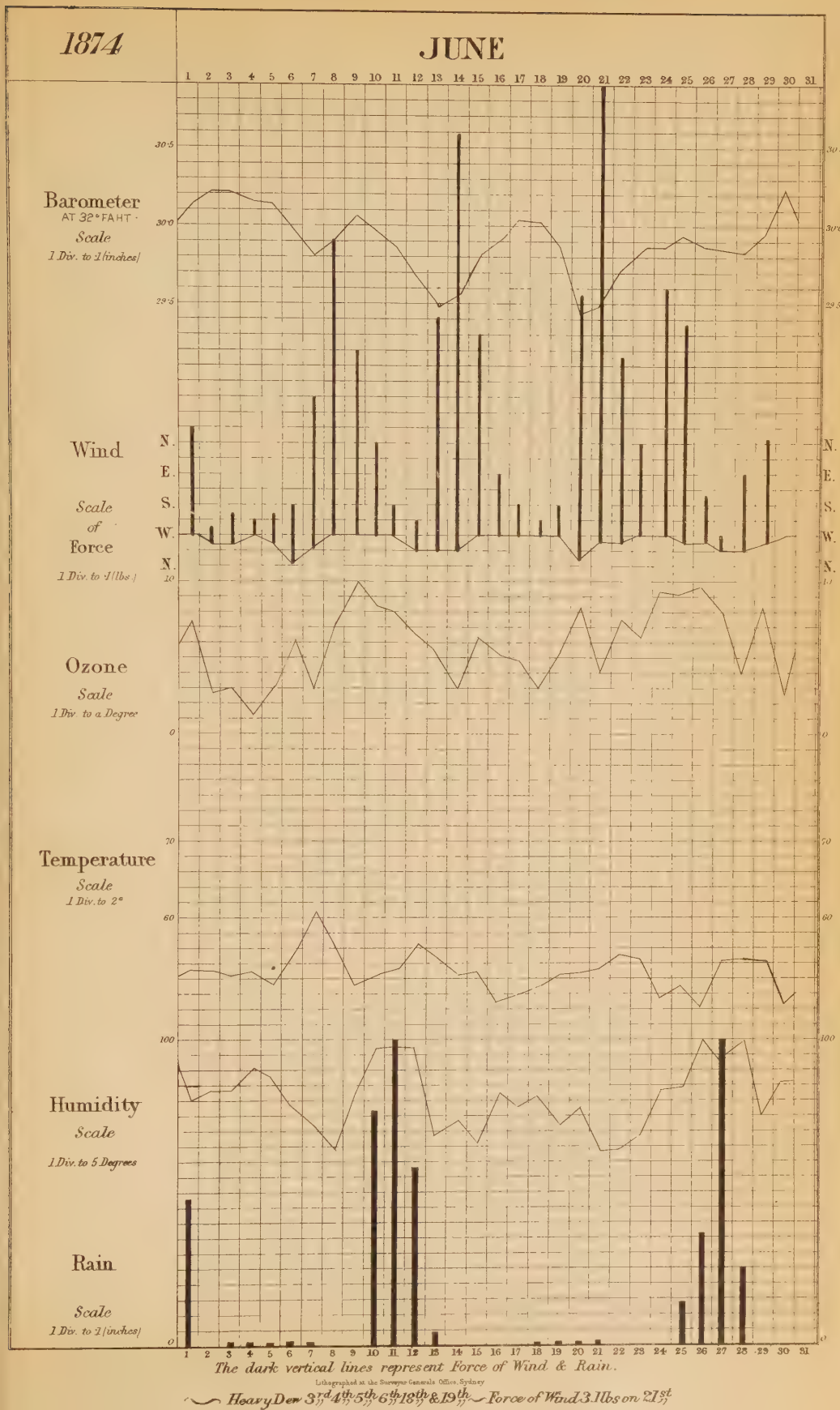
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Tenterfield—Rain, 6th, 10th, 12th, 14th.
Grafton—Rain, 10th and 12th.
Inverell—Rain, 10th, 11th, 12th, 13th, 14th, 20th, and 21st; frosty throughout the month.
Bourke—Rain, 6th, 10th, and 12th; light frost during night on 1st, 2nd, and 3rd; squally on the 12th.
Narrabri—Rain, 7th, 10th, 11th, 12th, and 20th; frost on 9th, 16th, 17th, 18th, 19th, 23rd, 27th, 29th, and 30th; squall on the 20th.
Armidale—Rain, 10th, 11th, 12th, 14th, 17th, and 23rd; frost, 3rd, 4th, 5th, 6th, 16th, 17th, 18th, 19th, 20th, and 22nd; light rain on 11th; snowing and light rain on the 15th.
Goonoo Goonoo—Rain, 4th, 7th, 11th, 12th, 20th, and 21st; thunderstorm, 11th.
Port Macquarie—Rain, 1st, 6th, 11th, 12th, 13th, 27th, and 28th; squally, 1st and 25th; lightning, 13th, 14th, 15th, 16th, 17th, 20th, and 25th; frost, 22nd; heavy sea, 16th and 17th.
Murrurundi—Rain, 11th, 12th, 13th, and 21st; frost, 8th, 17th, and 29th.
Cassilis—Rain, 10th, 11th, 12th, 14th, and 21st; foggy, 1st, 6th, and 28th; squally on 21st.
Scone—Rain, 1st, 10th, 11th, 12th, and 21st; frost, 2nd, 3rd, 9th, 17th, 18th, 19th, and 29th; ice on evaporator $\frac{1}{4}$-inch thick on 3rd, and $\frac{1}{8}$-inch thick on 17th; dense fog on 1st.
Muswellbrook—Rain, 9th, 10th, 11th, 12th, 19th, 24th, and 26th; fog, 2nd, 4th, and 5th; frost, 3rd, 15th, 16th, 17th, 18th.
Dubbo—Rain, 6th, 10th, 11th, 12th, 13th, 19th, and 20th; fog, 1st, 15th, and 16th; frost, 3rd, 4th, 9th, 15th, 16th, 17th, 18th, 19th, 25th, 26th, and 30th.
Mudgee—Rain, 10th, 11th, 12th, 14th, 21st, 25th, and 28th; fog, 1st, 2nd, 6th, and 25th; frost, 2nd, 3rd, 4th, 9th, 16th, 17th, 18th, 19th, 26th, and 30th; thunderstorm, 20th.
West Maitland—Rain, 9th, 10th, 12th, 26th, and 28th; foggy, 2nd, 3rd, 6th, 12th; frost, 17th and 18th.
Lambton—Rain, 9th, 10th, 11th, 19th, 25th, 26th, and 27th; lightning, 1st and 7th.
Newcastle—Rain, 1st, 9th, 10th, 11th, 12th, 19th, 20th, 24th, 25th, 26th, and 27th; foggy, 6th and 28th; stormy, 10th; very heavy sea, 9th, 15th, and 16th.
Orange—Rain, 6th, 7th, 11th, 12th, 13th, 14th, 19th, 20th, 21st, 22nd, 23rd, 27th, and 28th; frost, 1st, 2nd, 3rd, 4th, 5th, 6th, 9th, 16th, 17th, 18th, 19th, 26th, 27th, and 30th; foggy, 7th; heavy fall of snow on Canoblas, 22nd.
Bathurst—Rain, 12th, 14th, 21st, and 28th; foggy, 1st, 2nd, 3rd, 5th; frost, 4th, 6th, 9th, 16th, 17th, 18th, 19th.
Forbes—Rain, 11th, 12th, 13th, and 21st; dense fog on the 1st; frost on the 16th.
Kurrajong—Rain, 9th, 10th, 11th, 18th, 25th, 26th; frost, 2nd, 16th, 18th, 23rd, and 29th; boisterous, 21st and 22nd.
Mount Victoria—Rain, 10th, 11th, 12th, 14th, 15th, 21st, 26th; frost, 2nd, 16th, 17th, and 30th; snowing, 21st, 26th, and 27th; foggy, 8th; stormy, 7th, 8th, 13th, 20th, and 22nd.
Woodford—Rain, 10th, 11th, 12th, 20th, 26th, and 27th; fog, 12; gales from westward throughout 21st.
Parramatta—Rain, 10th, 11th, 20th, 26th, and 27th; raingauge blown over on 10th and 20th, therefore no rain recorded.
South Reef—Rain, 9th, 10th, 11th, 12th, 14th, 19th, 24th, 25th, 26th, and 27th; thunderstorm with lightning, 26th; gales, 9th, 14th, 21st, and 22nd; lunar halo, 23rd.
Sydney—Rain, 7th, 9th, 10th, 11th, 12th, 19th, 20th, 24th, 25th, 26th, and 27th; dew, 3rd, 4th, 5th, 6th, 18th, and 19th; rainbows, 10th, 12th, 25th, 26th, and 27th; thunderstorm, 26th; lightning, 12th, 15th, 16th, 20th, 25th, 26th, and 28th; S. gale, 9th; squally, 14th; lunar halo, 24th.
Liverpool—Rain, 6th, 7th, 9th, 10th, 11th, 12th, 19th, 24th, 25th, 26th, and 27th; frost, 2nd, 3rd, 4th, 5th, 16th, 17th, 18th, 19th, 20th, 29th, and 30th; lightning, 25th, 26th, 28th; stormy, 27th; foggy, 27th and 28th.
Wentworth—Rain, 5th, 6th, 7th, 11th, 12th, 13th, 19th, 20th, 21st, 22nd, and 28th; dew, 9th, 15th, 16th, 17th, 24th, 25th, and 26th; squally, 21st, 22nd, and 23rd.
Wilton—Rain, 8th, 9th, 10th, 11th, 18th, 19th, 24th, 25th, and 26th; thunder during day on 26th.
Cordeaux River—Rain, 9th, 10th, 11th, 12th, 20th, 23rd, 25th, 26th, and 27th; frost, 2nd, 3rd 4th, 5th, 6th, 16th, 17th, 18th, and 19th; sleet on 13th; lightning, 20th; thunder, 25th, 26th, 27th, 28th, and 29th.
Young—Rain, 6th, 12th, 13th, 19th, 20th, 21st, 22nd, 23rd, and 28th; frost, 2nd, 3rd, 4th, 5th, 9th, 15th, 16th, 17th, 18th, 19th, and 26th; foggy on the 25th.
Wollongong—Rain, 10th, 12th, and 25th.
Moss Vale—Rain, 9th, 10th, 11th, 12th, 13th, 18th, 25th, 26th, 27th, and 28th; frost, 2nd, 3rd, 4th, 16th, 17th, 18th; thunder on the 28th.
Goulburn—Rain, 11th, 12th, 14th, 19th, 21st, 22nd, 23rd, 24th, 26th, and 28th; frost, 2nd, 3rd, 4th, 5th, 6th, 9th, 16th, 17th, 18th, 19th, 25th, and 30th.
Wagga Wagga—Rain, 6th, 7th, 12th, 13th, 19th, 20th, 21st, 22nd, 27th, and 28th; foggy on the 1st and 15th.
Cape St. George—Rain, 9th, 10th, 11th, 12th, 13th, 14th, 20th, 24th, 25th, 26th, 27th, and 28th; gales on 7th, 8th, 14th, 16th, 22nd, and 24th; heavy squalls on 26th; thunderstorm with lightning on 28th; lightning also, 6th, 16th, 20th, and 26th; rainbow on 27th.
Queanbeyan—Rain, 7th, 12th, 19th, 21st, and 28th; frost, 2nd, 3rd, 4th, 5th, 6th, 9th, 16th, 17th, 18th, 19th, 25th, and 26th; foggy on 24th.
Urana—Rain, 6th, 7th, 12th, 13th, 19th, 20th, 27th, and 28th; frost, 3rd, 9th, 10th, 16th, 17th, 18th, and 19th.
Deniliquin—Rain, 7th, 12th, 19th, 21st, and 22nd; frost, 2nd, 9th, 15th, 16th, and 26th; foggy, 2nd, 23rd, and 24th.
Albury—Rain, 7th, 12th, 14th, 19th, 21st, 28th, and 29th; frost, 1st, 2nd, 9th, 10th, 11th, 12th, 15th, 16th, 26th, 27th; foggy, 3rd, 17th, 24th, and 25th.
Cooma—Rain, 11th, 12th, 14th, 24th, 25th, 26th, and 28th; frost, 3rd, 4th, 6th, 17th, and 18th; snowing on 13th; foggy, 2nd.
Eden—Rain, 6th, 8th, 9th, 11th, 12th, 13th, 14th, 19th, 20th, 21st, 23rd, 24th, 25th, 26th, 27th, 28th; thundersquall, 29th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney

Heavy Dew 3rd, 4th, 5th, 6th, 18th & 19th. Force of Wind 3 lbs on 21st

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF JULY, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[Price, 6d.] 3u 35—74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

JULY, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Fah.	Highest Reading	30·399 inches	on the 20th at 8 a.m., and 21st at 9 a.m.
	Lowest Reading	29·533	„ the 9th, at 2 p.m.
	Mean Height	29·941	

(Being 0·008 in. greater than that in the same month on an average of the preceding 15 years.

WIND	Greatest Pressure... ...	23·1 lbs.	On the 9th.
	Mean Pressure	0·7 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 15 years W.N.W.)

TEMPERATURE	Highest in the Shade ...	64·6	... On the 24th.
	Lowest in the Shade ...	36·9	... On the 17th.
	Greatest Range	22·9	... On the 17th.
	Highest in the Sun ...	99·0	... On the 24th.
	Highest in Black Box with Glass Top	135·2	... On the 24th.
	Lowest on the Grass ...	31·8	... On the 17th.
	Mean Diurnal Range ...	13·1	
	Mean in the Shade ...	51·2	

(Being 1·2 less than that of the same month on an average of the preceding 15 years.)

HUMIDITY ..	Greatest Amount... ...	100·0	... On the 3rd, 4th, 20th, 30th and 31st.
	Least	50·0	... On the 17th.
	Mean	83·7	

(Being 10·9 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	15 rain and 4 dew.	
	Greatest Fall	1·775 inch.	On the 31st.
	Total Fall	5·118 inches.	65 feet above ground.
		6·225 inches.	15 inches above ground.

(Being 2·058 inches greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	1·582 inch.
OZONE	Mean Amount	6·5

(Being 2·2 greater than that in the same month on an average of the preceding 15 years.)

ELECTRICITY ..	Number of Days Lightning	4
CLOUDY SKY ..	Mean Amount	6·5
	Number of Clear Days ...	4
METEORS ..	Number Observed ...	0

REMARKS.

The weather was cloudy, wet, and very cold during the month; on the 17th there was frost in Sydney which remained on the tops of some houses until after 9 a.m. At the country stations frosts were very frequent, and snow fell on the 6th, 14th, 28th, and 31st, and was so severe at Kiandra, that mails and telegraphic communication were interrupted for some time.

SYDNEY, JULY, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.								Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9, 3, & 9.
1		30·180	N.W.	215	53·0	51·0	57·9	44·4	13·5	51·1	84·6	40·2	58·3	86·0	·0	10·0
2		·180	W.N.W.	100	53·1	50·3	55·9	49·8	6·1	52·9	67·1	55·1	58·3	81·3	0·004	10·0
3		·313	W.N.W.	109	50·5	49·3	54·0	48·8	5·2	51·4	57·3	44·5	58·1	91·0	·0	10·0
4		·022	S.S.W.	426	52·9	52·9	56·6	49·2	7·4	52·9	79·6	48·0	58·2	100·0	1·304	10·0
5		29·934	W.N.W.	336	50·6	48·0	60·1	48·3	11·8	54·2	97·6	43·3	58·7	81·0	1·502	0·0
6	In Equat.	·932	W.S.W.	619	50·7	46·3	58·9	43·6	15·3	51·3	93·6	38·0	58·5	72·0	·0	4·3
7	Last Qr.	30·253	W.	186	49·7	46·3	56·1	46·1	10·0	51·1	91·6	41·5	58·1	77·3	0·027	6·3
8	Perigee.	·211	N.N.W.	360	49·8	45·1	56·1	40·2	15·9	48·2	94·0	33·9	58·3	71·0	0·001	10·0
9		29·819	W.N.W.	476	54·8	47·1	62·6	43·5	19·1	53·1	95·1	41·0	58·1	56·0	·0	6·3
10		30·156	W.N.W.	237	51·5	46·6	60·1	41·4	18·7	50·8	92·6	32·5	58·3	69·3	·0	0·0
11		·191	W.	99	47·9	46·2	51·8	43·6	8·2	47·7	76·2	37·9	58·1	87·3	·0	10·0
12	G. N. Dec.	29·986	W.	147	46·5	45·5	56·0	45·0	11·0	50·5	91·7	39·5	58·7	92·0	·0	10·0
13		·912	W.	317	49·5	48·5	58·6	42·7	15·9	50·7	95·8	37·9	58·2	91·3	0·002	10·0
14	New Moon.	·912	W.S.W.	459	49·9	47·6	52·2	47·5	4·7	49·9	69·1	44·1	58·1	83·3	0·683	10·0
15		30·141	W.	294	49·4	46·7	55·6	44·2	11·4	49·9	88·2	40·1	57·8	81·3	0·225	5·0
16		·288	W.	125	48·3	44·9	57·7	40·1	17·6	48·9	94·6	35·6	57·7	78·3	·0	0·0
17		·333	W.	190	48·8	44·2	59·8	36·9	22·9	48·3	94·4	31·8	57·9	72·0	0·003	0·0
18		·456	W.N.W.	115	49·8	47·0	59·1	41·3	17·8	50·2	95·2	35·3	57·8	81·7	·0	0·3
19		·445	W.N.W.	165	45·5	43·7	56·4	43·2	13·2	49·8	90·0	37·5	57·6	86·0	0·002	2·0
20	Equator	·487	S.S.W.	192	50·3	49·4	56·3	43·0	13·3	49·7	82·6	39·0	57·8	92·7	0·072	7·7
21	First Qr.	·584	W.	156	50·8	50·2	58·6	46·6	12·0	52·6	95·8	42·8	57·9	95·7	0·515	6·3
22	Apogee.	·558	W.	60	51·6	50·0	56·3	46·7	9·6	51·5	74·7	42·6	57·7	88·7	0·040	10·0
23		·429	W.N.W.	108	52·0	50·1	58·7	45·0	13·7	51·9	98·1	37·1	57·9	87·7	0·001	8·3
24		·256	N.N.E.	133	53·2	51·1	64·6	43·0	21·6	53·8	99·0	37·6	57·8	86·3	0·004	1·7
25		·072	N.W.	176	56·4	53·7	62·3	46·0	16·3	54·2	75·7	42·6	57·6	82·0	·0	7·7
26		·185	W.N.W.	93	48·8	48·0	61·9	45·2	16·7	53·6	97·6	39·4	57·8	93·0	0·010	5·0
27	G. S. Dec.	·273	W.	243	51·4	48·7	59·1	43·8	15·3	51·5	94·6	39·6	57·9	82·3	·0	6·3
28		·174	W.	363	51·3	47·9	58·3	44·1	14·2	51·2	96·6	41·3	57·3	78·3	0·069	7·3
29	Full Moon	·116	W.	279	53·0	50·4	57·1	46·6	10·5	51·9	80·5	42·5	58·5	82·7	·0	7·0
30		·146	W.N.W.	138	52·5	51·8	58·0	45·4	12·6	51·7	65·2	42·1	58·3	94·3	0·016	10·0
31		29·518	W.	653	50·4	49·7	53·4	48·4	5·0	50·9	60·0	49·0	58·1	94·3	1·775	10·0
Means	.....	30·176	W.	7569	50·8	48·3	57·7	44·6	13·1	51·2	86·1	40·4	58·0	83·7	Sum. 6·255	6·5

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·052 above the true mean for the day.

Heavy dew, 8th, 17th, 19th, and 24th.

SYDNEY, JULY, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·035	5·5	8·0	6·8	1.—Cloudy and dull; calm at 9 a.m.; drops of rain at 12·30 pm., and raining lightly at 1·22 p.m.; like thunderstorm, S.W., at 3 p.m.; shower at 4 p.m., and raining lightly again at 8·15 p.m.
2	0·024	6·5	5·0	5·8	2.—Cloudy during day and dull, like rain.
3	0·008	5·5	6·0	5·8	3.—Cloudy and dull, began to drop rain at noon, and afternoon. Steady rain all evening and throughout the night.
4	0·062	9·0	8·5	8·8	4.—Cloudy and raining throughout the day.
5	0·082	...	...	4·5	5.—Fine until noon, when clouds began to form. Cloudy at 12·45 p.m. until between 3 p.m. and 4 p.m., when clouds cleared again.
6	0·137	10·0	10·0	10·0	6.—Fine until about 1·30 p.m.; afterwards cloudy and fine alternately. Shower at 1·53 p.m.; like thunderstorm, S., at 4·45 p.m.
7	0·052	6·0	5·5	5·8	7.—Cloudy. Morning very cold, and dropping rain at 9·10 a.m. Clouds cleared about 3·30 p.m. No clouds in the evening, and heavy dew falling.
8	0·112	6·0	5·5	5·8	8.—Cloudy, dull, and cold; very dry fresh breeze in the evening.
9	0·127	7·0	8·0	7·5	9.—Cloudy and dull; fine after 1 p.m. until about 2 30 p.m.; cleared again about 4 p.m. No clouds at 9 p.m. Strong W. gale 11·30 a.m. until 4·30 p.m. Dropping rain at 3 p.m. and partial rainbow S.
10	0·060	5·0	7·0	6·0	10.—Fine; no clouds; light dry breeze, and light dew falling in the evening.
11	0·024	5·0	5·5	5·3	11.—Cloudy, dull, and almost calm.
12	0·012	...	...	4·0	12.—Cloudy and dull until 5·45 p.m., when clouds cleared; morning cold; raining lightly from 10·5 a.m. until about 11 am., and again from 3·30 p.m. until 3·45 p.m.
13	0·001	7·0	8·0	7·5	13.—Cloudy, dull, and cold; raining from 12·56 to 2·15 p.m., and from 6·30 p.m. to 7·15 p.m.; fine for awhile at 7·20 p.m., and cloudy again, with partial clearing, during evening. Lightning, E., at 8 p.m.
14	0·037	8·0	8·0	8·0	14.—Cloudy and dull; raining nearly all morning until 11·30 a.m.; partial rainbow, S.S.E., at 5 p.m. Evening cold.
15	0·076	6·0	7·0	6·5	15.—Forenoon cloudy and fine alternately. Afternoon and evening cloudy until about 6 p.m.. when the clouds cleared. Light dew in the evening and almost calm.
16	0·035	6·0	5·0	5·5	16.—Fine, clear; bank of clouds on horizon, E., in forenoon. No clouds in the afternoon or evening; hazy at 9 p.m., and dew falling.
17	0·078	3·0	5·0	4·0	17.—Fine, no clouds in morning or evening; some clouds on horizon, S.W., in forenoon. Sharp frost; frost on house tops until after 9 a.m.; light dry breeze.
18	0·030	3·0	8·5	5·8	18.—Fine, cold, calm, at 3 p.m. Dew falling in the evening.
19	0·018	...	...	4·0	19.—Fine until 11 a.m., then cloudy; drops of rain 5·11 p.m., raining lightly from 5·50 p.m. until about 7 p.m., and again at 10·30 p.m. Fine between 7·15 p.m. and 10·30 p.m.
20	...	8·0	9·0	8·5	20.—Fine from 8·45 a.m. until after 10 a.m.; light rain all forenoon, and afternoon from 10·30 a.m., and at intervals during evening.
21	0·040	8·0	8·5	8·3	21.—Fine until 10·30 a.m. Rainbow, W., at 7·30 a.m. Afternoon cloudy and dull; raining 2·25 p.m. until 2·55 p.m. Evening showery; partial clearing of clouds between showers.
22	0·023	3·5	5·5	4·5	22.—Cloudy and dull. Morning cold, and dropping rain at 8·52 a.m. Calm at 3 p.m., and 9 p.m., and very light rain dropping at 5·10 p.m.
23	0·056	6·0	5·0	5·5	23.—Light clouds and cloudy until evening, then fine until 8·30 p.m., when it turned cloudy again; calm at 9 p.m. and dew falling.
24	0·051	6·5	5·5	6·0	24.—Fine until evening; forenoon warm; evening cloudy and fine alternately—the clouds were light; lunar ring 7 p.m. about 30° diameter, and lunar halo at 9·50 p.m.
25	0·010	6·0	7·0	6·5	25.—Cloudy and dull until 4·30 p.m.; light rain at intervals after 12 53 p.m. Fine at 5·50 p.m. and throughout evening.
26	0·057	...	...	4·0	26.—Fine, clouds clearing at 9 a.m.; warm.
27	0·069	5·0	8·0	6·5	27.—Fine until 11·30 a.m. Lightning during evening from 6 p.m., N.W. to S. Lunar ring at 8 p.m., 30° diameter. Westerly squall 9·5 p.m. Raining from 9·30 p.m. to 10·15 p.m. Light shower of hail 9·45 p.m. Thunderstorm, E., 9·55 p.m. to 11 p.m.
28	0·093	6·5	7·0	6·8	28.—Fine until 9·45 a.m. Partial clearing of clouds at intervals during evening. Lunar halos frequent during the evening.
29	0·061	6·0	8·5	7·3	29.—Cloudy until 8·45 p.m., when it became fine; light rain from 11·50 a.m. to 12·5 p.m., and 1·45 to 2·5 p.m. Lunar rainbow, W., at 8·18 p.m. Dew falling in the evening.
30	0·011	9·0	10·0	9·5	30.—Cloudy and dull. Light rain 5·15 a.m. to 5·35 a.m., again at 10·45 a.m, and steadily from 1·17 p.m.; very heavy in the evening. Lightning, S.E., and single discharge of thunder at 7·57 p m.; lightning was S. at 8·25 p.m., and S.W. with low rumbling of thunder at 8·38 p.m.
31	0·101	9·5	9·0	9·3	31.—Cloudy, dull. Steady rain all morning from 1·45 a.m., and at intervals during forenoon, until about 11 a.m. About 9·35 a.m. it became very dark, and very dense clouds passed over to coast. Strong westerly in the evening, and raining from 5·45 p.m.
Means	Sum. 1·582	6·4	7·2	6·5	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

JULY, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																		
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	29·906	29·989	9 a.m.	29·867	5 p.m.	...	...	...	...	1	3	10	1	2	5	2	...	...	...	...	...	215	9·0	0·4	2·2 N. 10·45 a.m.
2	30·013	30·083	8 a.m.	29·948	1 & 2 p.m.	...	...	...	...	4	14	6	...	...	...	...	...	...	...	...	...	100	4·2	0·1	0·5 W.N.W. 7·20 a.m.
3	30·009	30·120	9 a.m.	29·857	7 a.m.	...	...	4	7	5	7	1	...	...	...	...	...	...	...	...	...	109	4·5	0·1	0·4 W. 11·12 a.m.
4	29·658	29·836	9 a.m.	29·571	5 & 6 p.m.	4	8	5	4	...	...	...	...	...	...	...	...	...	...	...	3	426	18·0	1·6	5·8 W. 4·33 p.m.
5	29·760	29·804	9 p.m.	29·704	2 p.m.	...	...	...	6	4	12	2	...	...	...	...	...	...	...	...	...	336	14·0	1·0	4·2 W. 8·40 p.m.
6	29·766	30·019	8 a.m.	29·628	3 p.m.	...	...	...	11	7	4	2	...	...	...	...	...	...	...	...	...	619	25·8	3·3	13·5 W. 4·57 p.m.
7	30·089	30·137	10 a.m.	30·037	4 a.m.	...	...	...	5	15	4	...	...	...	...	...	...	...	...	...	...	186	7·7	0·3	2·0 W.S.W. 10·50 a.m.
8	29·799	30·023	9 a.m.	29·633	8 & 5 a.m.	...	...	...	1	6	5	5	7	...	...	...	...	...	...	...	...	360	15·0	1·1	6·5 N.W. 11·50 a.m.
9	29·745	29·928	8 a.m.	29·533	2 p.m.	...	...	...	...	7	12	5	...	...	...	...	...	...	...	...	...	476	20·0	2·0	23.1 W.N.W. 12·33 p.m.
10	29·970	30·021	10 & 11 p.m.	29·921	12 a.m. 1 & 2 p.m.	...	...	...	...	11	12	1	...	...	...	...	...	...	...	...	...	237	9 9	0·5	2·4 W. 12·15 p.m.
11	29·851	30·001	9 a.m.	29·784	4, 5, 6, 7, & 8 a.m.	...	...	...	...	16	8	...	...	...	...	...	...	...	...	...	...	99	4·1	0·1	0·4 W. 5·35 p.m.
12	29·727	29·796	9 a.m.	29·693	2 p.m.	...	...	...	...	21	3	...	...	...	...	...	...	...	...	...	...	147	6·1	0·2	1·0 W. 8·45 a.m.
13	29·688	29·725	9 a.m.	29·656	5 a.m.	1	1	7	6	9	...	...	...	...	...	...	...	...	...	...	...	317	13·1	0·9	5·8 S.S.W. 8·35 a.m.
14	29·795	29·912	8 a.m.	29·707	2 p.m.	...	3	6	9	6	...	...	...	...	...	...	...	...	...	...	...	459	19·1	1·8	5·1 S.W. 2·15 p.m.
15	29·998	30·080	8 a.m.	29·910	2 p.m.	1	8	...	1	13	1	...	...	...	...	...	...	...	...	...	...	294	12·3	0·8	3·6 S.S.W. 2·15 p.m.
16	30·083	30·122	8 a.m.	30·040	3 p.m.	...	...	...	...	16	8	...	...	...	...	...	...	...	...	...	...	125	5·2	0·1	0·8 W. 9·55 a.m.
17	30·157	30·257	8 a.m.	30·067	2 p.m.	...	...	...	2	16	6	...	...	...	...	...	...	...	...	...	...	190	7·9	0·3	1·1 W.N.W. 2·15 p.m.
18	30·223	30·285	10 a.m.	30·193	3 p.m.	...	...	...	1	5	11	1	2	4	...	...	...	...	...	...	...	115	4·8	0·1	1·0 W. 11·20 a.m.
19	30·230	30·275	8 a.m.	30·175	2 p.m.	6	3	...	3	4	8	...	...	...	...	...	...	...	...	...	...	165	6.9	0·2	0·6 S.S.W. 1·20 p.m.
20	30·304	30·399	8 a.m.	30·234	1 & 2 p.m.	...	8	1	3	5	1	...	...	...	...	...	...	...	1	4	1	192	8·0	0·3	2·2 S.S.W. 1·10 p.m.
21	30·350	30·399	9 a.m.	30·326	1 & 2 p.m. 4 a.m.	5	2	...	...	12	3	...	...	...	...	...	...	...	...	1	1	156	6·5	0·2	1·3 S.S.W. 2·45 p.m.
22	30·286	30·373	10 a.m.	30·223	5 a.m.	...	...	2	3	10	8	1	...	...	...	...	...	...	...	...	...	60	2·2	0·0	0·2 W. 2·30 a.m.
23	30·116	30·240	9 a.m.	30·062	3, 5, 7, 8, & 9 a.m.	...	...	...	...	4	10	2	...	2	5	1	...	...	...	...	...	108	4·5	0·1	0·5 N.E. 4·25 p.m.
24	29·939	30·064	10 a.m.	29·864	5 & 6 a.m.	...	...	...	...	2	2	1	2	6	8	3	...	...	...	...	...	133	5·5	0·2	1·3 N.N.E. 7·35 p.m.
25	29·880	29·980	8 a.m.	29·805	1 & 3 p.m.	...	...	...	...	2	5	10	7	...	...	...	...	...	...	...	...	176	7·3	0·3	1·1 N.W. 1·50 p.m.
26	30·029	30·076	8 a.m.	29·981	2 p.m.	...	...	...	...	5	11	2	...	3	3	...	...	...	...	...	...	93	3·9	0·1	0·3 W.N.W. 5·40 a.m.
27	30·005	30·081	9 a.m.	29·948	5 a.m.	6	2	...	2	10	4	...	...	...	...	...	...	...	...	...	...	243	10·2	0·5	4·2 W. 9·15 p.m.
28	29·907	29·984	9 a.m.	29·817	6 p.m.	...	...	...	4	19	1	...	...	...	...	...	...	...	...	...	...	363	15·2	1·1	3·4 W.S.W. 4·10 p.m.
29	29·941	29·970	8 & 11 p.m.	29·898	1 & 3 p.m.	...	5	3	6	9	1	...	...	...	...	...	...	...	...	...	...	279	11·6	0·7	2·6 S.S.W. 1· 3 p.m.
30	29·719	29·960	10 a.m.	29·390	8 a.m.	...	...	3	...	5	6	2	2	1	2	1	1	1	...	...	...	138	5·7	0·2	4·2 E.N.E. 10· 5 p.m.
31	29·218	29·414	8 a.m.	29·084	4 p.m.	...	...	...	...	21	3	...	...	...	...	...	...	...	...	...	...	653	27·2	3·7	18·6 W. 7·37 p.m.
Sums or Means.	29·941	July 20th & 21st. 30·399 8 a.m. & 9 a.m.		July 9th. 29·533 2 p.m.		23	40	31	74	270	173	51	21	18	23	7	1	1	1	5	5	7569	10·2	0·7	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of JULY, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., July, 1874.						Temperature in Shade.				For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.					Rain.				Evaporation in inches.
						Direction	Force 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·223	52·0	70·0	S.E.	...	...	62·0	42·0	67·6	35·5	0·860	4	0·310	25	4·670
Tenterfield ...	80	...	...	43·0	...	W.	0·6	4·8	54·5	31·5	59·0	22·0	3·920	4	1·350	31	...
Grafton	22	...	...	49·5	...	S.W.	0·9	4·7	70·5	28·5	78·0	21·0	3·840	5	1·250	31	2·822
Inverell	122	...	...	46·0	87·0	W.	0·4	4·4	57·9	34·0	64·0	22·5	6·100	8	3·200	4	...
Bourke	393	...	...	48·2	...	S.W.	0·0	3·4	58·5	37·8	67·2	30·7	0·850	5	0·250	31	...
Narrabri	196	...	...	50·4	...	S.E.	0·5	3·3	62·0	38·7	71·5	30·5	4·840	6	1·700	4	2·890
Armidale.....	80	3278	...	46·7	83·0	W.	1·5	5·0	58·1	35·2	63·0	23·0	0·180	5	0·060	4	1·008
Goonoo Goonoo	110	1550	30·215	45·9	85·0	S.W.	0·4	3·3	57·4	34·4	63·5	21·5	4·950	2	3·750	5	...
Port Macquarie	0	53	30·131	53·6	...	S.W.	1·4	4·8	62·0	45·1	67·1	38·0	6·360	17	2·150	4	3·029
Murrurundi ...	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	44·5	...	N.W.	0·5	1·6	54·8	34·2	62·0	25·0	3·150	8	0·940	4	2·529
Scone	78	...	...	47·9	...	W.	1·2	4·9	56·4	39·3	62·0	28·0	3·380	7	1·940	3	1·362
Muswellbrook..	68	...	...	48·8	...	N.N.W.	1·5	4·5	60·9	36·7	65·1	25·4	...	...	...	...	...
Dubbo	182	...	...	39·1	...	W.	1·5	3·9	53·9	24·3	61·0	17·0	2·990	6	1·020	31	1·333
Mudgee	121	1500	...	42·9	...	W.N.W.	0·1	...	52·7	33·1	57·0	26·0	5·780	9	1·920	6	4·494
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	47·6	...	W.	1·6	4·9	56·1	39·1	63·0	26·0	4·380	5	1·750	4	2·188
Lambton	7	...	...	46·9	...	W.	1·3	...	55·7	38·0	64·0	29·0	3·910	10	1·920	4	4·773
Newcastle	1	112	30·110	53·8	81·0	W.N.W.	0·5	4·3	62·9	44·7	67·0	36·0	5·330	13	1·750	4	...
Orange.....	124	2891	...	41·1	...	S.W.	0·8	6·4	48·0	34·1	52·8	26·7	4·640	12	0·930	5	5·227
Bathurst	96	2200	30·186	42·8	84·0	W.	0·9	5·2	55·6	29·9	80·5	21·0	3·530	10	1·450	6	...
Forbes	176	...	30·284	46·1	...	N.E.	0·5	4·2	53·7	38·5	59·0	28·0	...	...	...	...	...
Kurrajong	36	1870	...	42·6	...	W.	1·7	5·5	47·8	37·4	55·0	30·0	4·570	8	1·500	4	...
Mount Victoria	61	3490	30·213	40·0	92·0	W.	0·0	7·3	47·3	32·6	54·5	27·8	2·090	11	1·500	6	1·089
Woodford	50	2192	30·030	45·5	...	W.	1·7	...	49·5	41·5	55·5	36·8	4·600	13	1·820	5	...
Parramatta.....	16	...	...	50·3	...	N.W.	0·5	0·6	58·4	42·1	60·5	36·0	3·620	2	1·850	5	...
South Reef	0	...	...	...	...	W.	1·2	6·3	...	...	...	...	7·070	12	1·940	5	...
Sydney.....	5	155	30·176	51·2	83·7	W.	0·7	6·5	57·7	44·6	64·6	36·9	6·255	15	1·775	31	1·582
Liverpool.....	16	...	30·114	46·0	...	W.	0·5	5·5	54·7	37·2	60·0	26·5	4·519	16	1·280	4	...
Wentworth.....	476	...	...	49·4	...	S.W.	1·4	4·5	57·8	40·9	66·5	32·0	0·820	8	0·270	12	2·442
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	3·970	7	1·180	30	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	8·660	11	2·380	31	...
Young	140	...	...	44·8	...	W.	0·3	4·3	54·1	35·4	61·0	28·0	3·240	11	0·750	5	2·653
Wollongong ...	0	...	...	51·3	...	S.W.	1·9	...	57·4	45·2	63·0	41·5	...	...	...	...	...
Moss Vale	31	...	...	41·1	...	W.	1·0	...	46·9	35·3	54·0	29·0	4·570	11	0·960	4&14	...
Goulburn.....	54	2129	30·218	43·0	92·0	W.	0·0	8·0	52·1	33·9	60·0	21·0	3·570	13	0·700	31	1·145
Terara	4	...	...	...	...	W.	...	...	...	...	...	...	6·370	8	0·295	31	...
Wagga Wagga	161	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cape St. George	0	175	30·191	50·8	72·0	W.	1·8	7·0	56·2	45·4	61·0	39·0	3·470	13	0·720	30	...
Queanbeyan ...	60	...	...	40·8	...	N.E.	0·9	6·3	50·7	30·8	56·0	22·0	2·780	9	0·700	31	1·019
Urana	218	...	...	46·9	...	N.E.	1·7	4·8	55·7	38·1	64·0	29·5	1·360	12	0·330	25	1·912
Deniliquin	287	410	30·246	46·0	86·0	S.W.	1·0	3·4	58·7	33·2	63·0	27·0	1·540	5	0·600	25	...
Kiandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Albury.....	175	572	30·151	43·4	88·0	N.E.	0·8	7·5	55·3	31·5	62·0	22·5	2·600	12	0·460	9	...
Cooma	52	2637	...	38·1	..	S.	1·2	7·0	49·2	27·0	58·6	16·8	1·650	9	0·670	31	...
Eden.....	0	107	30·127	49·6	87·0	S.	1·2	6·3	55·8	43·3	61·0	38·0	4·710	12	1·180	28	...

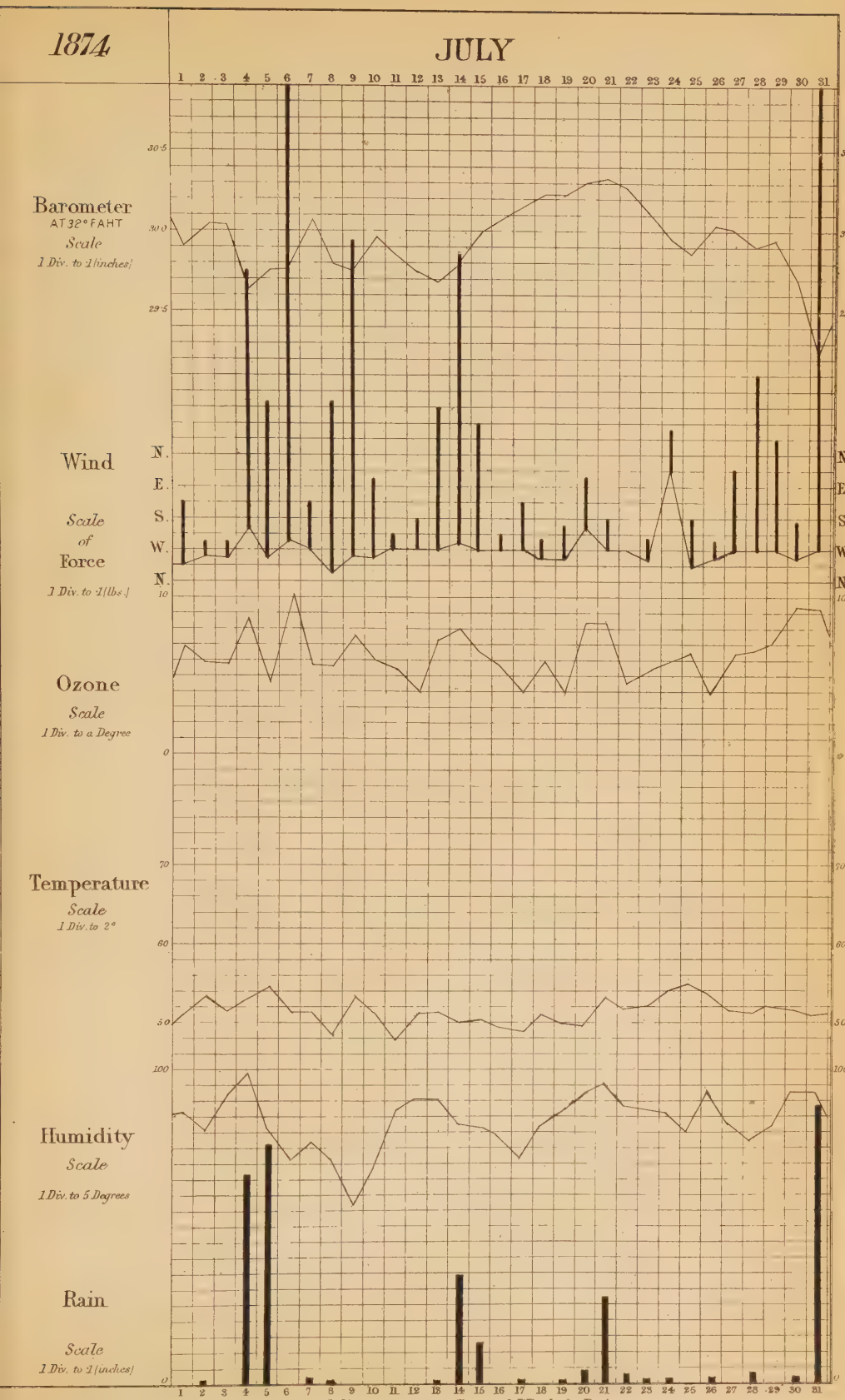
Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Rain, 1st, 2nd, 25th, and 31st.
Tenterfield—Rain, 3rd, 4th, 5th, and 31st.
Grafton—Rain, 3rd, 4th, 5th, 21st, and 31st; foggy, 8th, 9th, 17th and 18th.
Inverell—Rain, 2nd, 3rd, 4th, 5th, 7th, 26th, 28th, and 31st; river flooded on 4th; foggy on 28th.
Bourke—Rain, 2nd, 4th, 24th, 25th, and 31st; frosty, 6th and 20th; heavy fog on 13th.
Narrabri—Rain, 2nd, 3rd, 4th, 5th, 26th, and 31st; frost, 6th, 7th, 8th, 10th, 12th, 13th, 15th, 16th, 17th, 18th, 19th, 27th, 28th, and 29th.
Armidale—Rain, 3rd, 4th, 6th, 7th, and 31st; frosty, 11th, 16th, 17th, and 18th.
Goonoo Goonoo—Rain, 5th and 6th; foggy, 14th.
Port Macquarie—Rain, 2nd, 3rd, 4th, 5th, 7th, 8th, 13th, 14th, 20th, 21st, 22nd, 23rd, 24th, 26th, 27th, 28th, and 31st; frost, 5th; squally, 7th; gale, 31st; thunder, 12th, 13th, 14th, and 26th; lightning, 6th, 12th, 13th, 14th, 16th, 26th, and 27th.
Cassilis—Rain, 1st, 2nd, 3rd, 4th, 6th, 14th, 15th, and 31st; dense fog, 13th; foggy, 23rd and 27th; thunderstorm, 13th; hailstorm, 27th.
Scone—Rain, 1st, 2nd, 3rd, 4th, 11th, 12th, 31st; frosty, 8th, 16th, 17th, and 18th, and 26th; severe thunderstorm, 12th; S. gale on 31st.
Muswellbrook—Rain, 1st, 2nd, 3rd, 30th, and 31st; foggy, 11th, 15th, and 23rd; frost, 16th and 25th. Observer has no rain gauge.
Dubbo—Rain, 2nd, 4th, 5th, 25th, 26th, and 31st; river over banks, 6th; frost, 8th, 10th, 15th, 16th, 17th, 18th, 19th, 27th, and 28th; foggy on 26th.
Mudgee—Rain, 1st, 2nd, 4th, 6th, 14th, 15th, 25th, 27th, and 31st; floods on 6th; foggy on the 8th; frosty, 15th, 16th, 17th, 18th, and 19th.
West Maitland—Rain, 3rd, 4th, 6th, 21st, and 31st; frosty, 17th and 27th.
Lambton—Rain, 1st, 2nd, 3rd, 5th, 14th, 19th, 20th, 21st, 27th, and 30th; lightning, 22nd, and 28th.
Newcastle—Rain, 2nd, 3rd, 4th, 5th, 7th, 13th, 15th, 16th, 20th, 21st, 28th, 30th, and 31st.
Orange—Rain, 1st, 2nd, 4th, 5th, 6th, 7th, 10th, 13th, 14th, 25th, 26th, and 31st; frosty, 7th, 8th, 9th, 15th, 16th, 17th, 20th. 22nd, 23rd, 24th, 27th, 28th, and 29th; snow, 10th and 31st; meteor observed on 31st.
Bathurst—Rain, 1st, 2nd, 4th, 6th, 7th, 11th, 13th, 25th, 27th, and 31st; frosty, 8th, 15th, 16th, 17th, 20th, 21st, and 22nd.
Forbes—Rain, 1st, 4th, 6th, 12th, 25th, and 31st; frosty, 7th, 15th, 16th, 17th, and 26th; foggy, 28th.
Kurrajong—Rain, 1st, 4th, 5th, 14th, 20th, 21st, 27th, and 31st; frosty, 8th and 17th; thunderstorm, 27th; boisterous, 7th, 9th, 10th, and 31st.
Mount Victoria—Rain, 2nd, 4th, 6th, 7th, 13th, 15th, 20th, 21st, 22nd, 28th, and 31st; snowing all day on 6th, and heavily on 14th; snow 12 inches deep; stormy, 8th and 9th; frosty on 17th; foggy on 28th.
Woodford—Rain, 4th, 5th, 7th, 10th, 12th, 13th, 14th, 15th, 20th, 21st, 22nd, 28th, and 31st; light thunderstorm on 27th.
Parramatta—Rain, 4th and 5th.
South Reef—Rain, 2nd, 4th, 5th, 7th, 14th, 15th, 16th, 20th, 21st, 22nd, 28th, and 31st; gales on 6th, 9th, 14th, and 31st; lunar halo, 27th.
Sydney—Rain, 2nd, 4th, 5th, 7th, 13th, 14th, 15th, 20th, 21st, 22nd, 23rd, 26th, 28th, 30th and 31st; dew, 8th, 17th, 19th, and 24th; thunderstorms, 27th and 30th; lightning, 13th, 17th and 30th; gales, 9th and 31st, squally, 27th; rainbows, 9th, 14th, and 21st; lunar rainbow, 29th; lunar rings, 24th and 27th; lunar halos, 24th and 28th, frost, 17th; hail, 27th.
Liverpool—Rain, 1st, 2nd, 3rd, 4th, 7th, 10th, 13th, 14th, 15th, 20th, 21st, 22nd, 26th, 28th, 30th and 31st; frosty, 12th, 16th, 17th, 18th, 19th, 20th, and 26th; foggy, 2nd and 23rd; squally, 6th and 9th; thunder, 27th and 30th; also lightning same dates; lunar halo, 24th.
Wentworth—Rain, 1st, 2nd, 3rd, 9th, 12th, 13th, 23rd, 25th; dew, 3rd, 10th, 15th, and 29th; frosty, 7th, 16th, 17th, 20th; foggy, 12th, 16th, and 18th; squally on 25th.
Wilton—Rain, 1st, 3rd, 6th, 13th, 27th, 30th, 31st; thunderstorm, 27th.
Cordeaux River—Rain, 4th, 5th, 7th, 14th, 18th, 21st, 22nd, 28th, 29th, 30th, and 31st; frosty, 13th, 14th, 15th, 16th, 17th, 18th, 23rd, 24th, 25th, 26th, 29th, and 30th; gale, 9th; thunder, 27th, 28th, and 30th.
Young—Rain, 2nd, 4th, 5th, 7th, 9th, 10th, 12th, 24th, 25th, 26th, and 31st; frosty, 7th, 8th, 10th, 15th, 16th, 17th, 19th, 20th, 22nd, 26th, 27th, and 30th.
Wollongong—Rain, 3rd, 13th, 12th, 28th, 30th; gales, 12th and 29th.
Moss Vale—Rain, 4th, 5th, 7th, 12th, 13th, 14th, 21st, 26th, 28th, 29th, and 31st; frost, 16th; foggy, 21st and 30th; thunder and hail storm, 27th.
Goulburn—Rain, 2nd, 4th, 6th, 7th, 10th, 13th, 21st, 24th, 25th, 27th, 28th, 29th, and 31st; frosty, 7th, 15th, 16th, 17th, 18th, 20th, and 23rd; snow on 31st; foggy, 21st, 22nd, 27th, and 30th.
Terara—Rain, 1st, 4th, 5th, 7th, 14th, 21st, 29th, and 31st.
Cape St. George—Rain, 4th, 5th, 13th, 14th, 15th, 16th, 20th, 21st, 22nd, 28th, 29th, 30th and 31st; squally, 4th; gales, 6th, 7th, 9th, 14th, and 31st; lightning, 6th, 9th, 13th, 14th, 24th, 26th, and 27th.
Queanbeyan—Rain, 2nd, 4th, 6th, 9th, 10th, 13th, 25th, 27th, and 31st; frosty, 7th, 8th, 15th, 16th, 17th, 20th, 21st, and 27th; foggy, 11th and 30th.
Urana—Rain, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 12th, 14th, 25th, 26th, and 27th; frosty, 16th, 17th, 19th, and 30th; foggy, 3rd.
Deniliquin—Rain, 1st, 9th, 13th, 25th, and 28th; frosty, 7th, 16th, 21st, 29th, and 30th; thunderstorm, 24th.
Albury—Rain, 1st, 2nd, 4th, 6th, 7th, 9th, 10th, 13th, 18th, 21st, 25th, and 27th; frosty, 7th, 15th, 16th, 20th, 21st, 22nd, 29th, and 30th; foggy, 7th, 11th 13th, 16th, 18th, 27th, and 30th; squally, 6th and 9th; River rising until 10th.
Cooma—Rain, 1st, 6th, 8th, 9th, 18th. 25th, 28th, 29th, and 31st; frosty, 2nd, 3rd, 15th, 16th, 17th, 18th, 23rd, and 24th; foggy, 11th, 21st, 22nd, and 30th; snowing on 28th.
Eden—Rain, 1st, 2nd, 7th, 10th, 13th, 14th, 15th, 21st, 27th, 28th, 29th, and 31st; lightning, 9th, 12th, and 26th; S. gale, 9th; two meteors observed, 25th, falling to S.W.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Force of Wind 6th 3.3lbs & on 31st 3.7lbs Dew 8th 17th 19th & 24th

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF AUGUST, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1874.

[Price 6d.] 3u 36–74

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s.
Magnetic Variation 9° 32′ 22″ East.

AUGUST, 1874.

GENERAL ABSTRACT.

BAROMETER At 32° Fah.	Highest Reading	30·135 inches	on the 21st, at 11 p.m.
	Lowest Reading	29·213 „	on the 24th, at 2 p.m.
	Mean Height	29·801	

(Being 0·158 less than that in the same month on an average of the preceding 15 years.)

WIND	Greatest Pressure... ...	25·9 lbs.	on the 30th.
	Mean Pressure	0·9 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 15 years W.)

TEMPERATURE	Highest in the Shade ...	72·9	... On the 17th.
	Lowest in the Shade ...	38·9	... On the 3rd.
	Greatest Range	24·1	... On the 15th.
	Highest in the Sun ...	108·6	... On the 23rd.
	Highest in Black Box with Glass Top	171·2	... On the 27th.
	Lowest on the Grass ...	34·2	... On the 3rd.
	Mean Diurnal Range ...	16·0	
	Mean in the Shade ...	53·5	

(Being 0·8 less than that of the same month on an average of the preceding 15 years.)

HUMIDITY ...	Greatest Amount	100·0	... On the 8th.
	Least	44·0	... On the 18th.
	Mean	72·6	

(Being 0·8 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	11 rain and 4 dew.	
	Greatest Fall	0·460 inch.	On the 8th.
	Total Fall...	0·610 inch.	65 feet above ground.
		1·855 inch.	15 inches above ground

(Being 1·739 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	3·633 inches.
OZONE	Mean Amount	5·8 inches.

(Being 1·0 greater than that in the same month on an average of the preceding 15 years.)

ELECTRICITY ...	Number of Days Lightning	13
CLOUDY SKY ...	Mean Amount	4·5
	Number of Clear Days ...	4
METEORS ...	Number Observed ...	0

REMARKS.

The weather during the month was generally dry and clear, the rainfall being considerably below the average at Sydney, and small at the country stations; the amount being less than 1 inch at ten of them. The temperature was variable. Snow fell on the high land on the 4th, 24th, 25th, 28th, and 29th; while hot winds blew on the 15th, 17th, and 23rd. On the 3rd a faint Aurora was observed at Eden.

SYDNEY, AUGUST, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level & 32° Fah.	Wind. Prevailing Direction.	Wind. Total Velocity. — Miles.	Temperature. Dry. Mean — 9.3.9.	Temperature. Wet. Mean — 9.3.9.	Temperature. Shade. Max.	Min.	Range	Mean.	Sun. Max.	Grass. Min.	Sea. Water. — 9 a.m.	Humidity. 0-100. Mean 9.3.9.	Rain: — Inches.	Cl'dy Sky. — 0-10. Taken at 9, 3, & 9.
1		29·640	W.	325	51·2	47·9	55·4	46·6	8·8	51·0	69·2	43·7	58·4	77·7	0·435	9·7
2	Perigee in Equat.	·979	W.	276	46·7	45·0	54·3	43·3	11·0	48·8	89·1	38·2	58·7	87·0	0·002	10·0
3		30·127	W.	333	48·0	43·4	57·0	38·9	18·1	47·9	92·4	34·2	58·2	69 3	·0	0·0
4		·034	W.	414	49·7	44·1	57·7	42·9	14·8	50·3	95·5	36·5	58·4	65·3	·0	8·3
5	Last Qr.	·030	W.	240	48·1	45·1	57·7	44·6	13·1	51·1	72·0	40·8	58·7	78·7	0·015	6·7
6		·129	W.	205	49·0	46·1	57·8	40·2	17·6	49·0	96·2	35·5	58·5	80·3	·0	4·7
7		·204	W.	289	48·7	46·0	56·0	42·2	13·8	49·1	90·6	38·5	58·9	82·3	0·003	7·0
8		·228	W.	271	50·2	49·2	56·4	44·3	12·1	50·3	92·0	40·3	58·6	92·7	0·460	8·7
9	G. N. Dec.	·231	W.	106	48·6	48·0	57·7	46·5	11·2	52·1	86·1	44·0	58·7	95·0	0·169	10·0
10		·106	.....	117	53·6	51·9	61·6	45·8	15·8	53·7	98·3	41·5	58·5	88·3	0·001	5·3
11		·003	W.	188	53·5	50·7	63·6	45·0	18·6	54·3	99·2	41·5	57·9	84·0	0·036	5·0
12	New Moon.	·031	W.	281	54·5	49·7	62·4	46·9	15·5	54·7	98·5	41·5	57·7	71·0	0·057	2·7
13		·042	W.	306	53·3	49·5	59·6	44·5	15·1	52·0	95·7	38·2	57·9	75·3	·0	1·0
14		·101	W.	108	51·8	48·4	60·3	43·2	17·1	51·8	95·6	37·8	57·6	78·7	·0	0·0
15		·018	N.W.	98	54·5	50·4	65·3	41·2	24 1	53·3	98·6	36·9	57·1	75·7	0·002	4·0
16	In Equat.	·061	N.	278	52·4	48·9	64·1	45·8	18·3	55·0	100·5	39·2	57·5	76·0	·0	0·0
17	Apogee.	29·831	N.W.	307	64·2	58·1	72·9	52·6	20·3	62·8	105·0	48·1	57·1	68·3	·0	9·3
18		·884	W.N.W.	387	58·5	49·5	63·9	54·1	9·8	59·0	100·4	44·5	57·5	53·3	0·030	2·3
19		30·203	W.	150	54·7	49·6	65·0	44·6	20·4	54·8	99·6	35·6	57·6	72·0	·0	3·3
20	First Qr.	·283	W.	173	53·4	49·1	64·7	42·6	22·1	53 7	100·6	36·7	57·9	76·0	·0	4·3
21		·298	W.N.W.	180	54·8	51·1	63·6	44·4	19·2	54·0	98·4	39·5	57·5	78·0	0·001	1·3
22		·304	N.W.	110	55·0	51·4	63·1	45·0	18·1	54·1	99·6	41·2	57·2	78·3	0·001	3·0
23	G. S. Dec.	29·914	N.N.E.	426	57·1	51·2	69·1	46·5	22·6	57·8	108·6	38·0	57·5	66·0	·0	5·0
24		·504	W.	729	58·9	51·3	64·1	57·8	6·3	61·0	104·3	54·4	57·3	59·7	0·123	3·7
25		·514	W.	.....	55·2	47·0	60·3	52·2	8·1	56·3	97·6	46·5	57·2	55·3	·0	0·3
26		·756	W.	.....	54·8	47·8	62·6	46·6	16·0	54·6	99·1	38·3	57·9	60·3	·0	0·0
27	Full Moon.	·979	W.N.W.	.....	54·4	48·8	63·1	43·5	19·6	53·3	100·5	36·2	58·1	67·7	·0	3·3
28		·974	W.	297	53·5	46·7	62·0	43·6	18·4	52·8	98·2	36·1	58·5	61·0	·0	4·0
29	Perigee	·896	W.	384	52·4	46·3	61·6	45·4	16·2	53·5	101·7	41·8	58·8	64·0	0·020	5·3
30	In Equat.	30·002	W.S.W.	653	52·0	45·4	64·3	44·4	19·9	54·4	100·1	35·1	58·7	60·0	·0	7·0
31		·101	W.	438	54·1	45·6	60·8	46·0	14·8	53·4	98·6	37·5	58·3	53·3	·0	3·3
Sums or Means	.....	30·013	W.	8069	53·1	48·5	61·5	45·5	16·0	53·5	96·2	40·0	58·0	72·6	Sum. 1·355	4·5

Observations of Standard Barometer taken at 9 a,m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·041 above the true mean for the day. Dew fell on 10th, 15th, 21st, 22nd.

SYDNEY, AUGUST, 1874.

Date.	Evaporation. Inches.	Ozone, 0–10. Day.	Night.	Mean.
1	0·078	4·5	7·0	5·8
2	0·084	...	...	4·0
3	0·117	4·0	7·0	5·5
4	0·124	5·0	9·0	7·0
5	0·037	5·0	8·5	6·8
6	0·088	2·0	6·5	4·3
7	0·070	6·5	9·0	7·8
8	0·055	9·0	10·0	9·5
9	0·039	...	...	4·8
10	0·057	2·5	7·0	4·8
11	0·062	5·0	7·0	6·0
12	0·112	4·0	7·0	5·5
13	0·124	6·0	8·5	7·3
14	0·070	...	7·0	...
15	0·058	3·0	7·0	5·0
16	0·094	...	...	3·5
17	0·141	6·0	7·0	6·5
18	0·189	4·0	6·5	5·3
19	0·107	3·5	7·0	5·3
20	0·096	3·5	8·0	5·8
21	0·078	4·0	8·0	6·0
22	0·076	5·0	9·5	7·3
23	0·131	...	...	4·5
24	0·266	6·5	6·0	6·3
25	0·243	4·0	6·0	5·0
26	0·177	3·5	8·0	5·8
27	0·140	...	...	4·3
28	0·127	5·0	8·5	6·8
29	0·153	6·0	6·5	6·3
30	0·246	..	...	2·8
31	0·194	6·0	8·0	7·0
	Sum.			
Means	3·633	4·7	7·6	5·8

REMARKS.

1.—Cloudy and dull until evening, fine from 7·15 p.m. until 8 p.m. Raining at intervals during forenoon.
2.—Cloudy, morning cold, partial clearing of clouds during forenoon, and cleared about 12·30 p.m.
3.—Fine, no clouds in the morning or evening. Morning cold. Lightning S.E. at 11 p.m.
4.—Cloudy until about 7 p.m., when clouds cleared. Cloudy again at 9·18 p.m. Fresh dry breeze during day. Lightning E. at 7·35 p.m.
5.—Cloudy, dull, and cold. Began to clear after 7 p.m. ; fine at 7·40 p.m. Dropping rain in morning after 8·15 a.m. at intervals. Lightning E. at 9·15 p.m.
6.—Cloudy, clouds light; fine from 7 p.m. until 7·30 p.m. Dew falling in the evening.
7.—Morning cloudy and dull. Strong S. wind at 11·45 a.m., and turned fine for awhile. Cloudy and fine alternately during afternoon and evening. Light rain at 9·30 a.m. and 9·40 a.m. Showers at 6·56 p.m., 7·40 p.m., 8·25 p.m., 9·25 p.m., and heavily at 10·15 p.m.
8.—Cloudy, dropping light rain at intervals during forenoon. Afternoon and evening showery. Fine for awhile 6·30 p.m., and finally cleared at 11 p.m. Partial rainbow E. at 1·45 p.m., and again at 2·7 p.m.
9.—Cloudy, dull, and cold. Very light sprinkling rain at 9·31 a.m. and 11·44 a.m.; almost calm.
10.—Cloudy and fine alternately; low rumbling of thunder and dropping rain at 7·15 p.m. Lightning E. at 6·30 p.m., and N. at 7·35 p.m. Raining lightly 9·45 p.m.
11.—Fine and warm, cloudy from 8·0 a.m. until 8·45 a.m., and again after 4·15 p.m., when it looked like thunderstorm to W. Lightning N.E. at 6·33 p.m., and during evening until about 7·40 p.m. Raining 8 p.m.
12.—Forenoon fine until 12·45 p.m., when light clouds formed, and cleared about 6 p.m. Planet Venus visible to naked eye at 11·30 a.m. Lightning E. at 6·45 p.m., and S.S.W. at 9 p.m. No clouds at 9 p.m.
13.—Cloudy from noon until after 1 p.m. No clouds at 9 p.m. Strong, cold, dry breeze.
14.—Fine, warm, calm. No clouds in the evening; also hazy, and dew falling.
15.—Forenoon cloudy and dull until 11·30 a.m., and again from 5 p.m. until after 6 p.m. Drops of rain at 6 p.m. Evening calm. Lightning S. at 9 p.m.
16.—Clouds on horizon during day. Cloudy from 7·10 p.m. until 9·15 p.m. Warm.
17.—Very light clouds and cloudy. Hot winds blowing; like thunderstorm coming up in W. at 3 p.m.; raining at 3·19 p.m. and 5·10 p.m. Lightning E. at 6·34 p.m., and S.E. at 8·45 p.m.
18.—Fine until 6·15 p.m., when very thin filmy clouds formed. Fine at 7·50 p.m., and cloudy again about 9 p.m. Strong and very dry breeze until evening.
19.—Forenoon cloudy until after 10 a.m.; the clouds were light. Light dew falling in the evening.
20.—Forenoon cloudy until 11·45 a.m.; clouds were light. Evening hazy, and heavy dew falling. No clouds at 9 p.m.
21.—Cloudy from 11·5 a.m. until between 1 p.m. and 2 p.m. Heavy bank of clouds along coast at 9 a.m. Thunder E. at 10·10 a.m., extent of clouds at that time being only about one-tenth. Lightning N.E. at 8·10 p.m. Scattered clouds about in the evening.
22.—Cloudy and fine alternately during day. Calm at 9 p.m.
23.—Forenoon cloudy from 10·30 a.m. until 1·30 p.m.; light clouds, and cloudy again after 5·30 p.m. Fresh dry beeeze.
24.—Morning cloudy and dull; clouds cleared at 11·30 a.m. Strong and very dry breeze all day.
25.—Cloudy from 6·45 p.m. until 8·15 p.m. Lunar halos frequent during evening. Strong and very dry breeze until evening. Lightning S. at 9·18 p.m.
26.—Fine. Clouds on horizon along coast at 9 a.m. Fresh and very dry breeze during day.
27.—Fine until about 5·30 p.m., when clouds began to form. Cloudy about 6·15 p.m. Morning cold. Calm at 3 p.m.
28.—Cloudy after 3·45 p.m.; very heavy clouds like thunderstorm W. Clouds got lighter at 8·45 p.m. Lightning N.E. at 11 p.m. Atmosphere very dry.
29.—Cloudy until about 9·45 a.m. Lightning E. at 7·15 p.m., and N.E. at 8·5 p.m
30.—Cloudy from 9·10 a.m. until 1 p.m., and again from 5 p.m. until about 6 p.m. Lightning S.E. to N.E. at 8 p.m , and during evening. Evening stormy.
31.—Cloudy from about 1·30 p.m. until 3·30 p.m. Strong dry breeze. Atmosphere very dry. No clouds in the evening, and cold.

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·632	29·770	8 a.m.	29·452	9 a.m.	...	...	1	9	14	...	...	...	...	...	...	...	...	...	...	...	325	13·5	1·0	5·8	W.S.W.	10·40 a.m.
2	29·869	29·928	8 a.m.	29·783	9 a.m.	...	2	3	5	14	...	...	...	...	...	...	...	...	...	...	...	276	11·5	0·7	2·2	S.W.	12 noon
3	29·872	29·931	9 a.m.	29·844	4, 5, 6 & 7 a.m.	...	...	3	2	19	...	...	...	...	...	...	...	...	...	...	...	333	13·8	1·0	3·1	W.	3·45 a.m.
4	29·789	29·843	9 a.m.	29·740	3 p.m.	...	...	2	10	12	...	...	...	...	...	...	...	...	...	...	...	414	17·2	1·5	3·4	W.S.W.	10·40 a.m.
5	29·857	29·911	7 & 8 a.m.	29·804	3 p.m.	...	...	...	...	24	...	...	...	...	...	...	...	...	...	..	...	240	10·0	0·5	1·6	W.	10·45 a.m.
6	29·942	29·998	7 & 8 a.m.	29·886	2 & 3 p.m.	4	2	2	...	14	1	1	...	...	...	...	...	...	...	...	...	205	8·5	0·4	2·0	W.S.W.	10·35 a.m.
7	30·010	30 038	10 p.m.	29·968	2 p.m.	...	6	2	4	11	1	...	...	...	...	...	...	...	...	...	...	289	12·0	0·8	3·6	S.S.W.	1·5 p.m.
8	30·012	30·043	9 p.m.	29·970	2 p.m.	...	7	3	1	13	...	...	...	...	...	...	...	...	...	...	...	271	11·2	0·6	3·6	S.S.W.	11·50 a.m.
9	29·948	30·029	9 a.m.	29·897	4 & 5 a.m.	...	3	...	1	13	...	...	...	...	...	...	...	...	...	...	7	106	4·4	0·1	0·7	S.S.W.	12·30 p.m.
10	29·825	29·917	9 a.m.	29·790	5 a.m.	...	...	...	1	4	...	...	...	...	...	...	6	2	...	...	...	117	4·9	0·1	0·5	...	7·5 a.m.
11	29·776	29·823	8 a.m.	29·693	3 p.m.	...	...	2	1	14	2	1	...	...	...	1	2	...	...	...	...	188	7·8	0·3	1·4	W.	6·37 p.m.
12	29·805	29·843	9 a.m.	29·757	3 p.m.	...	...	1	6	16	...	...	...	...	...	...	...	...	1	...	...	281	11·7	0·7	3·1	W.	11·50 p.m.
13	29·854	29·887	10 p.m.	29·824	3 p.m.	5	4	2	2	11	...	...	...	...	...	...	...	...	...	...	...	306	12·7	0·8	2·9	S.S.W.	3·19 p.m.
14	29·833	29·913	9 a.m.	29·803	4 p.m. 4 & 5 a.m.	2	...	5	5	7	1	...	...	...	...	...	...	...	...	...	4	108	4·5	0·1	0·6	W.N.W.	5·7 a.m.
15	29·763	29·849	8 a.m.	29·674	4 p.m.	1	...	...	1	3	..	13	1	...	2	...	...	1	1	1	...	98	4·1	0·1	1·4	N.N.W.	7·35 p.m.
16	29·746	29·870	9 a.m.	29·644	8 a.m.	...	...	...	...	2	2	1	1	8	4	4	2	...	...	...	...	278	11·6	0·7	4·2	N.	7·30 a.m.
17	29·620	29·692	8 a.m.	29 537	3 p.m.	...	...	...	2	5	5	9	1	2	...	...	...	...	...	...	...	307	12·8	0·8	5·8	W.N.W.	3·50 p.m.
18	29·832	30·006	8 a.m.	29·676	12 a.m. & 1 p.m	...	...	...	...	11	13	...	...	...	...	...	...	...	...	...	...	387	16·1	1·3	14·6	W.N.W.	11·45 a.m.
19	30·015	30·076	8 a.m.	29·938	3 p.m.	3	...	...	2	16	3	...	...	...	...	...	...	...	...	...	...	150	6·3	0·2	2·2	W.	11·18 a.m.
20	30·057	30·101	8 a.m.	30·001	3 p.m.	2	2	...	...	11	9	...	...	...	...	...	...	...	...	...	...	173	7·3	0·3	1·4	W.	12·10 p.m.
21	30·092	30·135	11 p.m.	30 053	3 p.m.	2	5	2	...	5	9	...	...	...	...	1	...	...	...	...	...	180	7·5	0·3	1·3	S.S.W.	3·28 p.m.
22	29·961	30·116	9 a.m.	29·807	8 a.m.	...	...	3	...	2	...	7	1	1	...	1	3	4	1	...	1	110	4·6	0·1	1·3	N.N.E.	8·45 a.m.
23	29·382	29·735	9 a.m.	29·282	10 p.m.	...	...	...	1	...	5	1	2	4	7	2	2	...	...	...	...	426	17·7	1·6	4·8	N.N.E.	8·0 p.m.
24	29·267	29·330	9 a.m.	29·213	2 p.m.	...	...	...	1	14	8	1	...	...	...	...	...	...	...	...	...	729	30·3	3·2	14 6	W.	2·10 p.m.
25	29·424	29·556	8 a.m.	29·291	2 p.m.	...	...	...	...	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
26	29·671	29·793	8 a.m.	29·562	3 p.m.	...	...	...	9	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
27	29·768	29·803	11 p.m.	29·717	3 p.m.	..	...	...	1	8	9	1	1	...	1	3	...	...	...	...	...	...	...	...	...	...	.....
28	29·679	29·786	9 a.m.	29·642	4 p.m. & 3 a.m.	...	...	...	...	10	7	2	...	...	4	1	...	...	...	...	...	297	12·4	0·8	3·4	W.	7·45 a.m.
29	29·762	29·839	8 a.m.	29·673	3 p.m.	...	...	1	3	18	2	...	...	...	...	...	...	...	...	...	...	384	16·0	1·3	4·2	W.	3·38 p.m.
30	29·762	29·902	8 a.m.	29 627	4 & 5 p.m.	...	...	2	13	7	2	...	...	...	...	...	...	...	...	...	...	653	27·1	3·3	25·9	S.W.	8·10 p.m.
31	30·004	30·098	8 a.m.	29·917	9 a.m.	...	...	3	8	13	...	...	...	...	...	...	...	...	...	...	...	438	18·2	1·7	8·0	S.W.	10·35 a.m.
Sums or Means.	29·801	August 21st, 30·135 11 p.m.		August 24th 29·213 2 p.m.		19	32	36	88	350	79	37	7	15	18	13	15	7	3	1	12	8069	12·0	0·9			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL OBSERVATIONS,

For the Month of August, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., August, 1874.										For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force. 0-6.	Clouds. 0-10	Mean Max.	Mean Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	Evaporation in inches.
Thargomindah	640	450	30·104	56·6	59·0	S.E.	...	...	68·1	45·0	86·3	36·0	...	...	...	...	3·266
Tenterfield	80	...	...	44·6	...	W.	1·3	2·9	56·9	32·5	66·0	24·0	2·240	5	1·350	1	...
Grafton	22	...	...	56·8	...	S.W.	1·2	2·8	78·1	35·4	85·5	30·0	1·345	4	0·890	8	3·339
Inverell	122	...	...	46·2	84·0	W.	0·6	2·7	60·2	32·1	70·0	23·0	1·340	5	0·930	18	...
Bourke	393	...	...	52·2	...	S.W.	0·0	2·0	65·2	39·2	88·2	30·1	0·350	4	0·160	17	...
Narrabri	196	...	...	53·8	...	S.W.	0·7	1·4	68·6	38·9	86·3	30·1	0·720	4	0·470	18	2·774
Armidale	80	3278	...	45·8	86·0	W.	1·6	3·1	58·1	33·4	65·0	20·0	1·620	9	1·340	18	2·828
Goonoo Goonoo	110	1550	30·021	45·3	83·0	W.	0·7	...	59·8	30·8	69·0	21·0	2·620	3	1·370	1	...
Port Macquarie	0	53	29·990	54·5	...	W.S.W.	1·5	2·0	63·8	45 1	74·3	34·7	3·125	8	1·480	8	4·895
Murrurundi	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	46·9	...	N.W.	0·6	...	58·8	35·0	73·0	26·0	1·030	5	0·350	18	1·928
Scone	78	...	...	50·7	...	W.	1·9	2·2	60·9	40·5	70·0	30·0	0·500	4	0·300	1	1·501
Muswellbrook	68	...	...	51·4	...	N.W.	1·7	2·7	64·4	38·3	73·0	29·0	...	...	...	...	...
Dubbo	182	...	...	41·1	...	S.W.	0·9	1·5	57·1	25·1	71·0	18·0	1·170	5	0·500	24	2·344
Mudgee	121	...	...	44·7	...	W.S.W.	0·8	...	55·7	33·7	68·0	27·0	1·640	8	0·690	24	3·090
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	47·1	...	W.	1·8	4·2	59·3	34·9	71·5	26·5	2·020	6	0·360	1	4·885
Lambton	7	...	...	50·1	...	W.	1·1	...	62·1	38·0	74·0	27·5	3·860	8	1·900	8	4·669
Newcastle	1	112	29·905	52·6	75·0	W.	0·4	3·1	61·4	43·8	75·0	35·0	5·250	10	2·730	8	...
Orange	124	2891	...	43·2	...	S.	1·4	5·3	49·6	36·7	62·5	29·7	4·740	13	1·410	24	1·829
Bathurst	96	2200	30·017	46·3	78·0	W.	1·4	4·3	62·5	30·0	71·0	22·0	1·680	8	0·790	24	...
Forbes	176	...	30·166	47·2	...	W.	0·7	3·5	55·0	39·4	70·0	28·0	..	...	...	...	...
Kurrajong	36	1870	...	43·6	...	W.	1·6	3·9	50·6	36·6	63·5	29·0	0·720	4	0·300	11	...
Mount Victoria	61	3490	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Woodford	50	2192	29·869	46·5	...	W.	0·1	...	51·5	41·4	64·2	35·5	1·770	12	0·700	1	...
Parramatta	16	...	...	53·9	...	N.W.	0·8	0·9	60·2	47·6	67·8	39·0	0·050	1	0·050	24	...
South Reef	0	...	...	...	...	W.	1·3	4·2	...	...	...	...	1·790	10	0·860	8	...
Sydney	5	155	30·013	53·5	72 6	W.	0·9	4·5	61·5	45·5	72·9	38·9	1·355	15	0·460	8	3·633
Liverpool	16	...	29·963	47·2	...	W.	0·7	3·1	57·4	37·0	67·0	28·0	0·831	10	0·370	1	...
Wentworth	476	...	...	51·9	...	W.	1·9	3·9	61·7	42·0	71·7	34·3	1·030	12	0·240	17	3·420
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	0·800	4	0·380	11	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	2·250	7	1·140	1	...
Young	140	...	...	45·8	...	N.W.	0·4	3·0	56·3	35·3	67·0	29·0	3·150	9	1·240	24	...
Wollongong	0	...	...	51·3	...	W.	1·6	...	58·3	44·2	65·0	40·0	...	...	...	...	...
Moss Vale	31	...	...	41·9	...	W.	1·1	...	49·6	34·1	65·0	29·0	4·080	8	1·540	1	...
Goulburn	54	2129	30·045	42·6	80·0	W.	0·0	5·0	54·2	31·0	70·0	20·8	4·600	9	1·720	24	1·902
Terara	4	...	...	...	...	W.	...	...	...	...	...	...	3·890	7	2·200	2	...
Wagga Wagga	161	...	...	44·6	...	Calm.	0·0	...	54·4	34·8	65·0	29·0	2·780	9	1·170	24	1·681
Cape St. George	0	175	29·964	50·4	68·0	S.W.	1·8	5·5	56·4	44·4	68·0	35·0	1·120	4	0·500	1	...
Queanbeyan	60	...	...	43·8	...	S.S.E.	1·1	3·8	56·6	30·9	69·0	24·0	2·500	7	0·900	24	1 672
Urana	218	...	...	49·2	...	N.E.	2·0	4·6	58·8	39·6	70·0	29·5	1·030	8	0·320	24	2·998
Deniliquin	287	410	30·092	48·2	84·0	W.	1·6	3·4	61·9	34·4	72·0	25·0	0·710	6	0·250	17	...
Kiandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Albury	175	572	30·049	44·8	86·0	E.	0·9	2·5	58·3	31·2	68·5	23 5	1 630	12	0·420	31	...
Cooma	52	2637	...	38·5	...	S.	1·0	5·1	51·5	25·5	65·5	18·0	0·940	6	0 270	1	1 285
Eden	0	107	29·936	51·2	77·0	S.W.	1·7	4·1	58·1	44·2	67·0	39·0	2·750	11	2·450	...	...

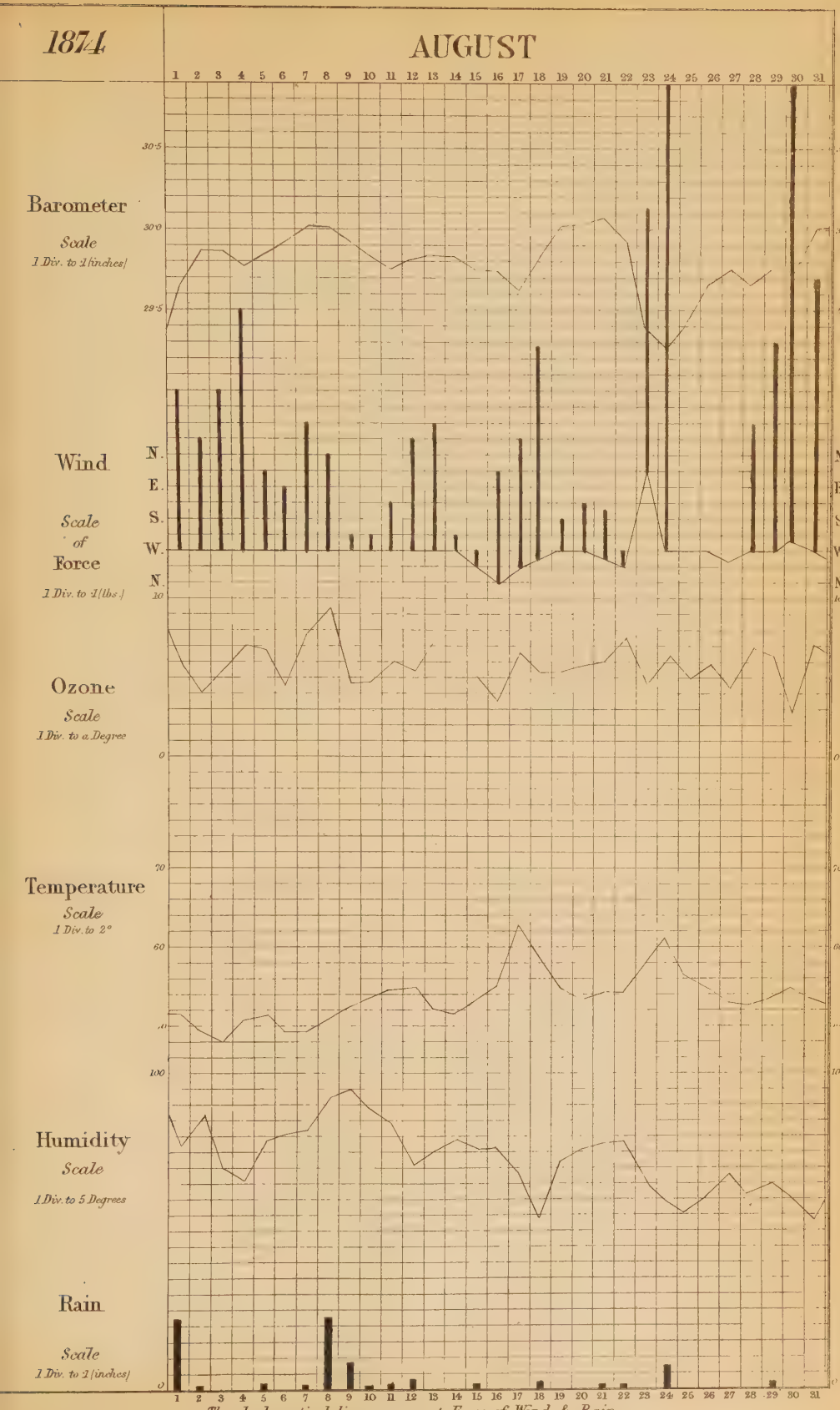
Arranged in order of latitude, with distance from the coast and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Hot wind, 22nd and 23rd; strong wind, 23rd to end of month.
Tenterfield—Rain, 1st. 2nd, 8th, 18th, and 29th.
Grafton—Rain, 8th, 9th, 11th, and 18th; foggy, 6th and 15th.
Inverell—Rain, 1st, 3rd, 11th, 12th, and 18th.
Bourke—Rain, 11th, 17th, 25th, and 29th; frost, 3rd. 4th, and 5th; thunder clouds on 11th; hot wind, 15th and 23rd; squally, 17th; W.N.W. gale, 30th.
Narrabri—Rain, 17th, 18th, 25th, and 29th; frost, 3rd, 4th, 5th, 6th, 7th, 8th, 12th, 13th, 14th, 15th, 26th, 27th, 30th, and 31st; squally on 17th.
Armidale—Rain, 1st, 5th, 11th, 18th, 25th, 26th, 27th, 29th, and 31st; frost, 3rd, 6th, and 14th; snowing, 29th; strong wind, 24th.
Goonoo Goonoo—Rain, 1st, 18th, and 25th; snow on mountains, 1st; foggy, 12th; lightning, 11th and 24th.
Port Macquarie—Rain, 1st, 2nd, 8th, 9th, 11th, 12th, 22nd, and 25th; heavy sea, 27th; thunderstorm during night of 7th and morning of 8th; lightning, 1st, 3rd, 4th, 6th, 8th, 9th, 10th, 11th, 12th, 13th, 29th and 30th; unusually severe frost on 2nd.
Cassilis—Rain, 18th, 24th, 25th, 29th, and 30th; lightning, 17th; hot wind, 23rd.
Scone—Rain, 1st, 7th, 17th, and 29th; heavy frost, 3rd, 4th, and 5th; snow on the range, 4th and 28th; lightning, 16th; lunar rainbow, 30th.
Muswellbrook—Raining heavily, 22nd; frost, 1st, 3rd, 5th, and 20th; foggy, 7th; strong wind, 22nd and 24th.
Dubbo—Rain, 1st, 2nd, 12th, 24th, and 29th; frost, 3rd, 4th, 5th, 7th, 8th, 13th, 14th, and 19th; dense fog on 12th.
Mudgee—Rain, 1st, 12th, 17th, 18th, 24th, 25th, 28th, and 31st; ice (not measured) on 5th; frost, 3rd, 4th, and 5th; dense fog, 5th.
West Maitland—Rain, 1st, 3rd, 8th, 10th, 24th, and 25th.
Lambton—Rain, 1st, 7th, 8th, 9th, 10th, 11th, 22nd, and 24th; hot wind all day on 17th; lightning, 1st, 6th, 7th, 8th, 9th, 10th, and 31st; thunder, 9th.
Newcastle—Rain, 1st, 2nd, 7th, 8th, 9th, 10th, 11th, 12th, 22nd, and 24th; stormy, 1st; heavy sea, 2nd, 27th, and 28th.
Orange—Rain, 1st, 2nd, 5th, 11th, 12th, 17th, 18th, 24th, 25th, 26th, 29th, 30th, and 31st; frost, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th and 31st; hail and snow storm, 4th, 24th, and 25th; snowing, 28th; thunderstorm, 17th; S.W. gale, 30th.
Bathurst—Rain, 1st, 17th, 18th, 24th, 25th, 26th, 29th, and 31st; frost, 4th; thunderstorm, 17th.
Forbes—Showery, 1st and 24th.
Kurrajong—Rain, 8th, 11th, 23rd, and 30th; frost, 2nd, 3rd, 5th and 27th; thunderstorm, 11th; boisterous on 17th, 23rd, 24th, 25th, and 30th.
Woodford—Rain, 1st, 2nd, 9th, 10th, 11th, 12th, 18th, 24th, 25th, 29th, 30th, and 31st; frost, 3rd, and ice on all shallow water; thunderstorm, 10th, and thunder heard all afternoon of 11th; light hail shower, 10th (lasted 10 minutes); S.W. gale, 24th.
Parramatta—Rain, 24th
South Reef—Rain, 1st, 5th, 6th, 7th, 8th, 9th, 12th, 18th, 24th, and 29th; thunder and hail storm, 7th; thunderstorm also on 20th; S.W. gale, 1st; and westerly gales, 24th and 25th.
Sydney—Rain, 1st, 2nd, 4th, 8th, 9th, 10th, 11th, 12th, 18th, 24th, and 29th; dew, 7th, 15th, 21st, and 22nd; hot wind, 17th; thunderstorms, 10th and 21st; lightning, 3rd, 4th, 5th, 10th, 11th, 12th, 15th, 17th, 21st, 25th, 28th, and 29th; rainbow, 8th; planet Venus visible with naked eye, 12th.
Liverpool—Rain, 1st, 2nd, 5th, 9th, 10th, 11th, 12th, 18th, 24th, and 31st; frost, 3rd, 4th, 6th, 7th, 14th, 19th, 20th, 21st, 22nd, 27th, and 30th; thunder and hail storm, 10th; dew, 13th, 14th, and 16th; lightning, 10th, 12th and 17th; foggy, 23rd.
Wentworth—Rain, 1st, 3rd, 4th, 5th, 10th, 15th, 17th, 24th, 25th, 26th, 28th, and 29th; dew, 7th and 13th; sharp frost, 5th; shower on 4th, with small hail; heavy thunder and hailstorm, 17th; sharp squall, 15th and 18th; gale on 25th.
Wilton—Rain, 4th, 10th, 11th, 23rd; thunderstorms, 10th and 11th.
Cordeaux River—Rain, 1st, 5th, 8th, 9th, 11th, 12th, 24th, and 25th; frost, 2nd, 4th, 7th, 10th, 11th, 13th, 14th, 15th, 19th, 20th, 21st, 22nd, 27th, and 28th; thunder, 10th and 11th; lightning, 15th and 30th; S.W. gales, 25th and 26th.
Young—Rain, 1st, 17th, 18th, 24th, 25th, 26th, 29th, 30th, and 31st; frost, 2nd, 3rd, 4th, 5th, 7th, 12th, 13th, 14th, 16th, 20th, and 21st; foggy, 12th; thunderstorm, 17th.
Moss Vale—Rain, 1st, 5th, 9th, 11th, 24th, 25th, 29th, and 31st; fall of snow, 4th; snow on ground morning of 29th; frost, 6th and 7th; foggy, 9th, 14th, and 22nd; blowing very hard, 25th.
Goulburn—Rain, 1st, 5th, 17th, 18th, 19th, 24th, 25th, 29th, and 31st; frost, 4th, 5th, 7th, 8th, and 27th; foggy, 14th; squally, 23rd.
Terara—Rain, 1st, 5th, 9th, 12th, 24th, 25th, and 31st; strong W. wind on 17th, 18th, 25th, 26th, and 30th.
Wagga Wagga—Rain, 1st, 10th, 17th, 24th, 25th, 26th, 29th, 30th, and 31st; fine nearly the whole of the month until 25th, and then dull until end of month.
Cape St. George—Rain, 1st, 5th, 8th, 9th; S.W. gale, 1st, and W. gale during night of 24th; very large waterspout and four severe showers of hail, 8th; lightning, 7th, 11th, 12th, 13th, 15th, 17th, 20th, 25th, 29th, and 30th.
Queanbeyan—Rain, 1st, 12th, 17th, 18th, 24th, 25th, and 31st; snowing, 4th; frost, 3rd, 4th, 6th, 7th, 8th, 11th, 13th, 14th, 20th, and 22nd; thunderstorm, 17th; foggy, 5th, 12th, and 27th.
Urana—Rain, 1st, 17th, 24th, 26th, 28th, 29th, 30th, and 31st; frost, 3rd and 8th.
Deniliquin—Rain, 15th, 17th, 21th, 28th, 29th, and 31st; frost, 5th, 7th, and 8th; stormy, 18th, 22nd, and 24th.
Albury—Rain, 1st, 10th, 12th, 15th, 17th, 18th, 24th, 25th, 26th, 28th, 29th, and 31st; frost, 3rd and 4th; heavy fog, 13th; S.W. gale on 23rd; squally, 24th and 30th.
Cooma—Rain, 1st, 4th, 17th, 18th, 24th, and 25th; snowing, 4th; hailstorm, 15th; frosty, 3rd, 6th, 7th, 11th, 12th, and 20th; foggy, 11th, 21st, and 22nd.
Eden—Rain, 1st, 2nd, 9th, 11th, 12th, 13th, 14th, 16th, 19th, 25th, and 29th; light Aurora, 3rd, W.S.W. to S.; thunder squall, 10th, 11th, and 15th; lightning, 12th, 15th, 17th, and 25th; hailstorm on 18th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Force of Wind on 24th 3.2lbs & 30th 3.3lbs Dew fell on 10th 15th 21st & 22nd

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS

FOR THE

MONTH OF SEPTEMBER, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

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METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s.
Magnetic Variation 9° 32′ 22″ East.

SEPTEMBER, 1874.

GENERAL ABSTRACT.

BAROMETER At 32° Fah.	Highest Reading	30·240 inches	on the 30th, at 8 a.m.
	Lowest Reading	29·033 „	on the 20th, at 3 a.m.
	Mean Height	29·694	

(Being 0·207 less than that in the same month on an average of the preceding 15 years.)

WIND	Greatest Pressure... ...	38·7 lbs.	on the 6th.
	Mean Pressure	1·0 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	W.	

(Prevailing direction during the same month for the preceding 15 years W.)

TEMPERATURE	Highest in the Shade ...	79·1	... On the 26th.
	Lowest in the Shade ...	41·6	... On the 2nd.
	Greatest Range	28·8	... On the 18th.
	Highest in the Sun ...	116·1	... On the 26th.
	Highest in Black Box with Glass Top	188·2	... On the 24th.
	Lowest on the Grass ...	33·1	... On the 2nd.
	Mean Diurnal Range ...	16·2	
	Mean in the Shade ...	57·7	

(Being 0·9 less than that of the same month on an average of the preceding 15 years.)

HUMIDITY ...	Greatest Amount	99·0	... On the 10th.
	Least	37·0	... On the 3rd.
	Mean	68·7	

(Being 0·3 less than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	14 rain and 0 dew.	
	Greatest Fall	0·969 inch.	On the 11th.
	Total Fall	1·790 inch.	65 feet above ground.
		2·100 inches.	15 inches above ground.

(Being 0·169 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	4·523 inches.
OZONE	Mean Amount	6·2 inches.

(Being 1·2 greater than that in the same month on an average of the preceding 13 years.)

ELECTRICITY ...	Number of Days Lightning	5
CLOUDY SKY ...	Mean Amount	5·1
	Number of Clear Days ...	4
METEORS ...	Number Observed ...	1

REMARKS.

The weather was fine and cool, with moderate rainfall. Snow fell on the mountains on the 7th, 20th, 21st, and 28th; and thunderstorms were frequent. Hot winds blew on the 3rd at Liverpool, and on the 18th at Bourke.

SYDNEY, SEPTEMBER, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level & 32° Fah.	Wind.		Temperature.								Humidity. 0-100.	Rain. — Inches.	Cl'dy Sky. — 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea. Water.			
			Prevailing Direction.	Total Velocity. — Miles.	Mean — 9.3.9.	Mean — 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	— 9 a.m.	Mean 9.3.9.		Taken at 9, 3, & 9.
1		30·295	W.N.W.	195	54 5	48·8	64·5	41·1	20·4	54·3	103·4	38·0	58·7	66·3	0·000	6·7
2		·162	W.N.W.	205	59·0	51·6	65·4	41·6	23·8	53·5	104·4	33·1	58·4	59·7	·0	10·0
3	Last Qr.	·055	N.	308	67·0	55·7	77·3	49·6	27·7	63·5	108·4	43·9	58·8	49 7	·0	4·3
4		29·937	N.W.	303	68·7	58·9	74·8	58·7	16·1	66·8	108·0	48·6	58·5	53·7	·0	7·3
5	G. N. Dec.	·956	W.N.W.	201	60·3	58·7	66·3	59·5	6·8	62·9	91·6	51·4	58·7	89·7	0 010	8·7
6		·736	W.	964	59·0	49·4	63·6	54 5	9·1	59·1	88·7	45·8	58·8	50·0	0·106	0·0
7		·716	W.N.W.	495	56·7	47·9	62·2	53·8	8·4	58·0	99·1	46·9	58·5	53·7	·0	1·3
8		·932	W.	326	55·8	47·0	64·3	46·3	18·0	55·3	100·1	33·5	58·9	53·7	·0	0·0
9		30·221	S.	179	54·3	49·9	58·6	45·1	13·5	51·8	88·6	38·6	58·7	72·3	·0	10 0
10		·124	W.S.W.	167	52·3	51·4	55 0	47·4	7·6	51·2	65·2	42·5	58·1	93·7	0·189	10·0
11	New Moon.	·027	W.	323	53·7	51·2	60·0	49·6	10·4	54·8	97·3	47·0	58·3	84·0	0·969	10·0
12	In Equat.	·085	S.	276	54·8	51·4	60 8	45·9	14·9	53·4	101·7	45·8	58·4	78·3	0·309	5·7
13		·135	N.N.E.	204	53·6	51·4	62·3	46·0	16·3	54·2	106·2	40·2	58·7	85·0	0·001	8·0
14	Apogee.	29·713	N.W.	288	58·6	54·7	63 1	51·2	11·9	57·2	94·6	46·5	58·1	76·3	0·060	4·0
15		·759	W.	224	63·1	54 6	71·2	53·3	17 9	62·3	111·5	43·2	58·4	58·3	0·155	3·7
16		·903	W.	281	52·0	49·9	57·2	47·4	9·8	52·3	89·6	40·7	59·0	85·7	·0	9·7
17		·989	W.	307	55·8	51·8	63·1	46·6	16·5	54·9	102·4	42·0	58·6	76·7	0·020	2·0
18		·941	N.N.W.	228	62·2	54·7	72·5	43·7	28·8	58·1	107·6	41·2	59·0	63·7	0·044	1·3
19	First Qr.	·840	N.E.	183	59·6	55·6	69 0	53·2	15·8	61·1	110·5	47·4	58·5	76·3	·0	3·0
20	G. S. Dec.	·602	W.S.W.	406	59·0	54·7	72·0	48 1	23 9	60 1	109·6	41·9	58·7	74·0	·0	0·0
21		·365	W.	628	56·5	49·1	63·7	48·8	14·9	56·3	102·9	45·0	58·5	59·3	0·044	4·0
22		30·007	W.N.W.	176	55·2	49·0	61·5	46·0	15 5	53·8	101·6	38·0	58·3	64·0	·0	0·0
23		·099	W.N.W.	169	57·8	51·3	66·1	43·1	23·0	54·6	105·1	36·5	58·7	63·3	·0	3·0
24		29·969	N.E.	241	61·1	57·0	70·7	48·6	22·1	59·7	108·9	43·5	58·6	76·7	·0	8·3
25		·749	N.W.	282	68·5	61·3	77·2	57·9	19·3	67·6	113·4	46·4	58·5	64·7	·0	7·3
26	In Equat. Full Moon.	·436	W.	448	66·9	59·3	79·1	66·2	12·9	72·7	116·1	58·9	58·8	61·3	·0	5·0
27	Perigee	·676	S.	227	60·5	52·7	64·8	50·5	14·3	57·7	105·6	43·5	59·6	58 0	0·045	1·0
28		·820	W.	271	55·3	50·0	61·1	49·0	12·1	55·1	100·6	...	59·3	69·0	0·147	7·0
29		30·022	S.	.....	55·8	50·3	62·4	45·1	17·3	53·8	102·0	39·6	59·4	68·0	0·001	4·0
30		·267	W.S.W.	.....	54·8	51·1	61·9	46·4	15·5	54·2	104·6	38·6	59·6	76·0	·0	8·0
Sums or Means	.....	29·918	W.	8505	58·4	52·7	65·7	49·6	16·2	57·7	101·6	43·0	58·7	68·7	Sum. 2·100	5·1

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·040 above the true mean for the day. Dew fell on 10th, 15th, 21st, 22nd.

SYDNEY, SEPTEMBER, 1874.

Date	Evaporation. Inches.	Ozone, 0–10. Day.	Night.	Mean.	Remarks.
1	0·122	6·5	6·0	6·3	1.—Fine after 6·30 p.m. Clouds very light during day, and cold.
2	0·113	4·0	4·0	4·0	2.—Cloudy, afternoon and evening dull, like thunderstorm.
3	0·162	5·0	6·5	5·8	3.—Fine after 1·30 p.m., and hot wind blowing. Bank of clouds S.W. at 9 p.m.
4	0·149	6·0	6·5	6·3	4.—Fine from 12·30 p.m. until after 1 p.m., and again about 6·30 p.m. until 9 p.m. Light rain from 10·20 a.m. until 10·45 p.m. Atmosphere very dry and warm.
5	0·027	9·5	10·0	9·8	5.—Cloudy, dull. Calm at 9 a.m., very light rain from about 7 a.m. until after 9 a.m. and at intervals from 1 p.m. until about 8·45 p.m., when clouds began to break.
6	0·433	...	...	1·3	6.—Fine. Very strong gale blowing all day also during night.
7	0·266	5·0	7·5	6·3	7.—Fine. Strong dry breeze until evening, almost calm at 9 p.m., cloudy from 7·30 p.m. until 8·45 p.m.
8	0·188	6·0	7·0	6·5	8.—Fine. Strong breeze until after 11 a.m., light breeze rest of day.
9	0·056	6·0	8·5	7·3	9.—Cloudy and very dull like rain, partial clearing of clouds after 7·30 p.m., calm at 9 p.m, raining at 11·2 p.m.. also in the night.
10	.....	8·5	9·0	8·8	10.—Cloudy, dull, and raining lightly; dropping rain only at 1 p.m.
11	0·131	8·0	9·5	8·8	11.—Cloudy, morning showery until about 10 a.m. Partial clearing of clouds during afternoon, towards evening turned dull. Fine at 11·30 p.m. and turned cloudy again before midnight.
12	0·127	6·0	9·5	7·8	12.—Cloudy and fine alternately until 3·30 p.m., then fine. Very heavy rain at 12·30 a.m. Light shower at 10·43 a.m. Calm at 9 p.m. and dew falling.
13	0·090	...	...	4·0	13.—Fine from 9·30 a.m. until about 10 a.m., and again from 1 p.m. until about 3·30 p.m. Scattered clouds during day. Shower in the night.
14	0·069	8·5	6·5	7·5	14.—Fine after 2 p.m. Forenoon very dull. Rained from 9·53 a.m. until about 1 p.m., clouds began to clear at 1·30 p.m. Lightning E.S.E. at 7·15 p.m.
15	0·144	6·0	4·0	5·0	15.—Fine after 2·30 p.m. and very dry fresh breeze. Clouds much broken in forenoon. Calm at 9 p.m.
16	0·021	7·5	8·0	7·8	16.—Cloudy, dull, began to rain lightly, 10·52 a.m., and rained during forenoon; light drops of rain at 3 p.m. Clouds cleared in the evening and clouded up again at 8·45 p.m. Lightning E.N.E., 8·10 p.m. and S.E. at 9·45 p.m.
17	0·121	6·5	7·5	7·0	17.—Cloudy and fine alternately; like thunderstorm W. at 3 p.m.; raining, 5·55 p.m., until 7 p.m.
18	0·114	5·0	7·0	6·0	18.—Dense fog until 7·30. Cloudy from 10 a.m. until about 1·30 p.m. Hot wind blowing all afternoon. No clouds at 9 p.m.
19	0·151	5·5	8·0	6·8	19.—Fine, very warm, calm at 9 a.m. Cloudy from 7·45 p.m. until 9·15 p.m; clouds light; dew falling in the evening. Very brilliant meteor at 6·15 p.m., apparent altitude 100 feet from the Earth, travelling from S. to N., and left a train of sparks behind, for a second or two, after it disappeared between some houses.
20	0·208	...	...	3·0	20.—Cloudy at 4 p.m.; drops of rain, 5·5 p.m., and light rain at 6·17 p.m. Thunderstorm from N., with lightning, 6·20 p.m., and dropping rain. Storm went round to coast; another thunderstorm S.E., 8·30 p.m., and lightning visible all round during evening; very heavy shower, 8·37 p.m., of rain and hail; thunder at intervals until about midnight.
21	0·227	4·5	7·0	5·8	21.—Cloudy until 6·30 p.m.; clouds were scattered. Lightning N.E. to S., 6·30 p.m., and during evening.
22	0·138	6·0	7·0	6·5	22.—Fine, warm, atmosphere dry. No clouds in the evening until about 10·30 p.m., when light clouds formed.
23	0·155	5·0	7·0	6·0	23.—Evening cloudy after 5 p.m.; clouds were light; lunar ring at 7 p.m. about 30° diameter. No clouds at 9 am.
24	0·167	6·0	5·5	5·8	24.—Light clouds and cloudy at 9·20 a.m.; dew falling in the evening; dull after 9 p.m. and almost calm; lunar ring during evening about 45° diameter. Dropping rain, 10·28 p.m., until about 10·45 a.m.
25	0·224	4·5	5·0	4·8	25.—Very warm; at noon light clouds formed; dull, like thunderstorm at 2·30 p.m. until after 5 p.m.
26	0·203	5·0	7·0	6·0	26.—Forenoon cloudy and dull; afternoon cloudy and fine alternately; evening fine; like thunderstorm, W., at 12·30 p.m.; clouds passed round to the coast; thunderstorm, N.E., 1·3 p.m. until 1·25 p.m. and raining until 2·45 p.m.; fresh dry breeze in evening.
27	0·225	...	...	4·5	27.—Fine until 11·45 a.m., and again from 12·15 p.m. until 3·30 p.m.; dropping rain at 6·52 p.m., and raining from 8·35 p.m. until about 10·15 p.m
28	0·165	6·0	8·0	7·0	28.—Fine after 7·45 p.m.; strong breeze; raining lightly at intervals between 7·3 p.m. and 7·30 p.m.; lightning, N.E., at 8·18 p.m., and during evening.
29	0·221	6·5	8·0	7·3	29.—Fine until 11·30 a.m., and again after 3·40 p.m.; clouds were light during forenoon; fresh dry breeze.
30	0·106	6·0	8·5	7·3	30.—Cloudy; light showers at intervals during day; rainbow, W., at 7·20 a.m., and partial rainbow, N.E., at 5 p.m.; fine from 7·10 p.m. until 10·40 p.m.
Sum.	4·523				
Means		6·1	7·2	6·2	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																				
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	30·013	30·109	9 a.m.	29·951	4 a.m.	...	...	...	...	4	6	3	3	3	1	4	...	...	...	...	...	195	8·1	0·3	2·0	N.	8·5 p.m.
2	29·880	29·975	9 a.m.	29·839	4 & 6 p.m.	...	...	...	...	1	17	5	1	...	...	...	...	...	...	...	...	205	8·5	0·4	1·4	W.N.W.	8·5 p.m.
3	29·709	29·872	9 a.m.	29·562	3 a.m.	...	...	1	...	...	...	5	8	8	2	...	...	...	...	...	...	308	12·8	0·8	3·1	N.	4·15 p.m.
4	29·717	29·758	11 p.m. 7 & 8 a.m.	29·613	6 p.m.	...	...	...	1	1	10	10	2	...	...	...	...	...	...	...	...	303	12·6	0·8	5·1	W.	10·30 a.m.
5	29·639	29·777	9 a.m.	29·528	4 a.m.	...	...	...	1	7	8	1	5	...	...	2	...	...	...	...	...	201	8·4	0·3	4·2	W.	8·50 a.m.
6	29·514	29·584	9 p.m.	29·444	2 p.m.	...	...	...	...	18	6	...	...	...	...	...	...	...	...	...	...	964	40·2	8·1	38·7	W.	2·15 p.m.
7	29·593	29·739	8 a.m.	29·499	1 p.m.	...	...	...	1	8	14	1	...	...	...	...	...	...	...	...	...	495	20·6	2·1	19·8	W.N.W.	9·55 a.m.
8	29·876	30·020	8 a.m.	29·750	9 a.m.	...	1	1	10	12	...	...	...	...	...	...	...	...	...	...	...	326	13·6	1·0	7·2	W.S.W.	9·45 a.m.
9	29·987	30·037	9 a.m.	29·934	4 & 5 a.m.	8	3	...	1	6	4	1	...	...	...	...	...	...	...	...	1	179	7·5	0·3	1·6	S.S.W.	11·20 a.m.
10	29·859	29·943	9 a.m.	29·815	4 a.m.	2	3	1	8	7	...	...	...	...	...	...	...	...	...	1	2	167	7·0	0·2	0·6	W.S.W.	3·10 a.m.
11	29·831	29·884	8 a.m.	29·784	4 p.m.	7	6	1	2	8	...	...	...	...	...	...	...	...	...	...	...	323	13·5	0·9	3·4	S.S.W.	1·50 p.m.
12	29·900	29·934	10 p.m. & 8 a.m.	29·854	2 p.m.	6	5	...	1	5	6	...	...	...	...	...	...	...	...	...	1	276	11·5	0·6	2·9	S.	2·0 p.m.
13	29·780	29·948	9 a.m.	29·581	8 a.m.	...	3	...	...	1	...	...	...	2	5	2	5	5	1	...	...	204	8·5	0·3	3·1	N.N.E.	5·15 a.m.
14	29·457	29·605	8 a.m.	29·262	4 p.m.	...	...	...	...	...	8	12	...	1	3	...	...	...	...	...	...	288	12·0	0·7	4·2	W.N.W.	6·5 p.m.
15	29·650	29·713	8 a.m.	29·558	3 p.m.	...	...	...	1	18	5	...	...	...	...	...	...	...	...	...	...	224	9·3	0·4	5·1	W.	3·55 p.m.
16	29·699	29·785	8 a.m.	29·625	3 p.m.	...	...	...	...	14	5	3	1	...	...	...	...	...	...	...	1	281	11·7	0·7	2·0	W.S.W.	10·25 p.m.
17	29·787	29·816	8 9 10 11 & 12 p.m.	29·745	3 p.m.	3	4	...	3	12	...	...	...	...	...	...	...	...	...	...	2	307	12·8	0·8	2·0	S.S.W.	11·10 a.m.
18	29·622	29·759	9 a.m.	29·551	5 p.m.	1	2	2	1	4	3	5	6	...	...	...	...	...	...	...	...	228	9·5	0·4	2·0	S.S.W.	3·5 a.m.
19	29·496	29·658	9 a.m.	29·402	4 & 7 a.m.	...	...	...	...	1	6	1	...	5	3	7	1	...	...	...	...	183	7·6	0·2	1·8	N.E.	4·50 p.m.
20	29·148	29·423	9 a.m.	29·033	3 a.m.	...	1	2	6	3	1	...	1	3	1	5	...	...	...	...	...	406	16·9	1·4	11·5	N.E.	4·55 p.m.
21	29·396	29·664	3 a.m.	29·175	12 a.m.	...	...	...	7	17	...	...	...	...	...	...	...	...	...	...	...	628	26·2	3·4	19·8	W.	1·45 p.m.
22	29·828	29·901	8 a.m.	29·773	3 p.m.	...	...	1	...	3	11	...	...	1	1	6	1	...	...	...	...	176	7·3	0·2	1·0	N.E.	5·35 p.m.
23	29·842	29·911	9 a.m.	29·795	3 a.m.	...	...	...	...	3	6	4	1	...	...	3	4	3	...	...	...	169	7·0	0·2	1·0	E.	12·55 p.m.
24	29·641	29·791	9 a.m.	29·552	4 & 5 a.m.	...	...	...	...	1	3	3	3	4	1	1	8	...	...	...	...	241	10·0	0·5	2·6	N.	12·5 a.m.
25	29·357	29·571	9 a.m.	29·237	8 a.m.	...	...	...	...	...	1	8	5	1	2	2	5	...	...	...	...	282	11·7	0·7	2·0	E.N.E.	3·50 p.m.
26	29·304	29·464	8 a.m.	29·149	11 a.m.	...	...	4	3	11	3	1	1	1	...	...	...	...	...	...	...	448	18·7	1·7	14·6	W.	1·5 p.m.
27	29·534	29·614	8 a.m.	29·464	2 & 3 p.m.	10	3	2	7	2	...	...	...	...	...	...	...	...	...	...	...	227	9·5	0·4	...	...	.....
28	29·717	29·826	8 a.m.	29·627	3 p.m.	8	2	1	1	9	...	...	...	...	...	...	...	...	...	...	...	271	11·3	0·6	2·6	S.	9·15 p.m.
29	29·932	30·066	8 a.m.	29·840	9 a.m.	8	5	4	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
30	30·124	30·240	8 a.m.	30·060	10 11 & 12 a.m. [& 1 & 2 p.m.	7	6	...	9	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
Sums or Means.	29·694	September 30th, 30·240 8 a.m.		September 20th, 29·033 3 a.m.		60	44	20	70	178	123	63	37	29	19	32	24	8	1	1	7	8505	12·7	1·0			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups records the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of September, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., September, 1874.									For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force. 0-6.	Clouds. 0-10.	Mean Max.	Mean Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·040	62·6	61·0	W.S.W.	...	...	73·3	51·9	83·2	39·0	1·640	7	0·870	5	3·042
Tenterfield	80	...	...	50·8	...	W.	1·2	3·6	64·1	37·4	74·0	26·0	3·250	6	1·480	25	...
Grafton	22	...	...	62·4	...	N.W.	1·2	4·1	84·6	40·1	92·0	29·5	2·830	7	1·770	25	3·279
Inverell	122	...	...	53·6	78·0	W.	0 8	4·0	66·6	40·5	74·0	25·0	2·720	7	0·700	27	...
Bourke	393	...	...	58·4	...	N.E.	0·1	2·9	69·7	47·0	84·0	38·5	1·940	7	0·570	27	...
Narrabri	196	...	...	59·7	...	W.	1·5	2·8	73·2	46·1	87·1	32·9	1·250	6	0·520	28	4·391
Armidale	80	3278	...	48·3	90·0	W.	2·0	3·9	61·5	35 1	70·0	30·0	1·460	6	0·430	28	2·530
Goonoo Goonoo	110	1550	29·920	53·5	...	W.	0·8	4·6	67·5	39·5	82·0	25·0	2·270	9	0·780	28	...
Port Macquarie	0	53	29·921	59·3	...	S.W.	1·5	3·0	69·0	49 5	78·0	39·1	1·440	10	0·530	12	4·486
Murrurundi	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	52·9	...	W.	0·5	1·6	64·0	41·8	80·0	24·0	2·090	8	0·950	6	2·055
Scone	78	...	...	56·0.	...	W.N.W.	1·4	4·2	66·4	45·5	79·0	32·5	2·420	10	0·820	27	3·732
Muswellbrook	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	47·1	...	W.	1·2	3·8	62·5	31·7	73·5	21·0	1·980	4	0·720	14	3·085
Mudgee	121	...	...	45·1	...	W.	1·0	...	55·0	35·2	77·0	31·0	3·510	14	0·700	7	3·855
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	52·5	...	W.	1·5	4·6	65·6	39·4	78·5	26·9	1·375	10	0·420	10	3·999
Lambton	7	...	...	52·7	...	W.	1·2	...	65·3	40·1	75·0	32·0	2·990	11	0·610	28	3·300
Newcastle	1	112	29·901	57·7	72·0	W.	0·5	3·8	66 5	48·8	81·5	41·0	3·690	13	1·320	11	...
Orange	124	2891	...	48·6	...	S.	1·6	6·1	54·6	42·5	68·0	35·5	5·260	17	1·080	6	2·015
Bathurst	96	2200	29·984	51·0	78·0	W.	1·4	2·4	67·8	34·1	76·5	24·5	2·670	11	0·750	28	...
Forbes	176	...	30·049	52·7	...	N.W.	0·7	4·6	61·8	43·5	69·0	31·0	..	...	...	...	..
Kurrajong	36	1870	...	48·3	...	W.	1·5	4·6	55·4	41·2	72·0	35·0	1·960	8	0·670	27	...
Mount Victoria	61	3490	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Woodford	50	2192	29·789	50·9	...	W.	0·1	...	56·6	45·1	70·8	39·0	1·940	11	0·610	28	...
Parramatta	16	...	...	55·5	...	S.W.	0·7	0·9	63·6	47·3	66·3	44·1	1·420	10	0·600	11	...
South Reef	0	...	...	...	...	W.	1·3	4·9	...	...	...	...	2·160	14	0·620	11	...
Sydney	5	155	29·918	57·7	68 7	W.	1·0	5·1	65·7	49·6	79·1	41·6	2·100	14	0·969	11	4·523
Liverpool	16	...	29·882	...	...	W.	0·6	4·2	62·2	41·4	75·0	31·0	0·914	9	0 270	11	...
Wentworth	476	...	...	55·5	...	W.	2·0	5·6	65·3	45·6	70·0	38·1	0·910	11	0·410	14	4·310
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	1·020	7	0·320	14	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	1·460	10	0·330	27	...
Young	140	...	...	53·8	...	N.W.	0·5	4·4	63·1	44·5	75·0	32·0	2·580	10	0·590	21	3·512
Wollongong	0	...	...	57·1	...	S.	1·6	...	65·4	48·7	74·0	43 0	...	...	...	...	...
Moss Vale	31	...	...	48·1	...	W.	1·7	...	56·6	39·5	75·0	31·0	1·170	5	0·410	15	...
Goulburn	54	2129	29·961	48·5	81·0	W.	0·0	6·9	60·5	36·5	78·2	27·0	1·760	8	0·560	28	2·675
Terara	4	...	...	...	...	W.	...	...	...	...	...	...	1·430	5	0·430	17	...
Wagga Wagga	161	...	...	52·6	...	.....	0·0	...	62·5	42·6	71·0	32·0	3·700	6	1·400	15	3 631
Cape St. George	0	175	29·858	55·0	68·0	S.	1·9	6·1	61·0	48·9	72·0	43·0	0·360	8	0·110	30	...
Queanbeyan	60	...	...	51·6	...	E.N.E.	1·3	3·9	65·0	38·1	75·0	30·0	2·100	8	0·400	*	1 668
Urana	218	...	...	53·0	...	W.S.W.	2·1	5·4	63·5	42·5	73·5	32·5	2·730	10	0·640	14	3·748
Deniliquin	287	410	29·993	51·8	75·0	N.W.	1·4	4·2	66·8	36·7	79·0	27·0	2·500	7	0·800	14	...
Kiandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Albury	175	572	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cooma	52	2637	...	46·0	...	S.W.	1·1	6·5	60·4	31·6	77·0	19·0	0·560	4	0·320	26	1 354
Eden	0	107	29·843	53·6	70·0	S.	1·5	6·1	60·5	46·7	72·0	42·0	2·450	12	0·500	15	...

Arranged in order of latitude, with distance from the coast and height above the sea where it is known. Only 16 of the stations have barometers.
* 4th and 28th.

REMARKS.

REMARKS.

Thargomindah.—Rain, 5th, 6th, 9th, 14th, 26th, 27th, and 29th; frost, 1st, 2nd; thunderstorms, 5th, 6th, 13th, 25th, and 26th; lightning, 4th, 13th, 18th, 20th, 25th, and 26th; hurricane, 21st.

Tenterfield.—Rain, 7th, 14th, 25th, 26th, 27th and 28th.

Grafton.—Rain, 10th, 11th, 14th, 21st, 25th, 26th, and 27th; foggy, 2nd; thunderstorms, 21st and 24th.

Inverell.—Rain, 6th, 11th, 14th, 25th, 26th, 27th, and 28th; thunderstorms, 24th and 25th; hailstorms, 10th and 25th; lightning, 10th.

Bourke.—Rain, 5th, 6th, 10th, 14th, 26th, 27th, and 28th; gales, 4, 20, and 27; hot wind on 18th.

Narrabri.—Rain, 6th, 11th, 25th, 26th, 27th, and 28th; frost, 1st, 2nd, 29th, and 30th; storm during night of 25th; foggy, 27th.

Armidale.—Rain, 7th, 11th, 14th, 17th, 28th, and 29th; snowing, 28th.

Goonoo Goonoo.—Rain, 1st, 6th, 15th, 17th, 22nd, 25th, 26th, 28th, and 29th; gale, 21st; thunderstorm, 25th.

Port Macquarie.—Rain, 6th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 27th, and 28th; thunderstorms, 16th, 25th, and 27th; lightning, 14th, 20th, 21st, 25th, 26th, 27th, 28th, 29th, and 30th; heavy sea, 9th, 10th, 29th, and 30th: squally, 11th, 12th, 27th, and 28th.

Cassilis.—Rain, 6th, 12th, 14th, 18th, 19th, 20th, 22nd, and 28th; thunderstorms, 11th, 14th, 18th, 19th, 25th, 26th, and distant thunder, 30th; lightning, 18th, 25th, and 30th; hailstorm, 30th.

Scone.—Rain, 5th, 9th, 11th, 12th, 13th, 21st, 25th, 27th, 28th, and 30th; frost, 2nd, 3rd, and 23rd; snow on range, 7th; thunderstorms, 26th and 27th; W. gale, 21st.

Dubbo.—Rain, 6th. 14th, 17th, and 21st; frost, 1st; foggy, 17th; gale, 20th.

Mudgee.—Rain, 5th, 7th, 8th, 10th, 12th, 14th, 15th, 16th, 21st, 22nd, 25th, 26th, 28th, and 29th; sleet, 21st; thunderstorm, 25th.

West Maitland.—Rain, 10th, 11th, 12th, 14th, 15th, 17th, 18th, 21st, 25th, and 26th.

Lambton.—Rain, 10th, 11th, 12th, 14th, 15th, 17th, 18th, 21st, 25th, 28th, and 30th; lightning, 3rd and 9th; thunderstorm and lightning, evening of 20th, and a most magnificent meteor in the midst of an unusually brilliant display of lightning burst with immense volume of sparks from zenith to the earth.

Newcastle.—Rain, 6th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 18th, 21st, 27th, 28th, and 29th; heavy sea, 23rd.

Orange.—Rain, 4th, 5th, 6th, 7th, 8th, 11th, 14th, 15th, 16th, 17th, 21st, 22nd, 25th, 27th, 28th, 29th, and 30th; snowing, 20th and 21st; hail, 20th and 29th; frost, 1st, 2nd, 22nd, and 23rd; thunderstorm, 20th and 26th; lightning, 29th and 30th.

Bathurst.—Rain, 4th, 7th, 8th, 10th, 11th, 14th, 15th, 17th, 21st, 22nd, and 28th; sleet, 21st; frost, 1st; thunderstorms, 20th and 26th.

Forbes.—Rain, 15th, 22nd, and 27th; foggy, 17th.

Kurrajong.—Rain, 10th 13th, 16th, 17th, 20th, 26th, 27th, and 30th; boisterous, 6th, 7th, 14th, and 20th; Thunderstorms, 25th and 28th.

Woodford.—Rain, 6th, 10th, 11th, 12th, 14th, 15th, 17th, 18th, 21st, 27th, and 28th; thunderstorms, 20th and 26th; westerly gales, 6th and 21st.

Parramatta.—Rain, 6th, 11th, 12th, 14th, 15th, 17th, 18th, 21st, 27th, and 28th.

South Reef.—Rain, 5th, 6th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 18th, 21st, 27th, 28th. and 30th; thunderstorms, 21st and 26th; westerly gales, 6th, 7th, 21st and 26th.

Sydney.—Rain, 5th, 6th, 10th, 11th, 12th, 13th, 14th, 15th, 17th, 18th, 21st, 27th, 28th, and 29th; dew, 12th, and 19th; dense fog, 18th; Thunderstorms, 2nd, 20th, and 26th; lightning, 14th, 16th, 20th, 21st, and 28th; hot winds, 3rd, and 18th; lunar ring, 23rd and 24th; rainbow, 30th; and gale on 6th; very brilliant meteor, 19th.

Liverpool.—Rain, 6th, 10th, 11th, 12th, 14th, 15th, 17th, 18th, and 21st; frost, 1st, 2nd, and 22nd; thunderstorms, 5th, 20th, and 26th; hot wind, 3rd; foggy, 18th and 19th; lightning, 5th, 20th, and 26th.

Wentworth.—Rain, 4th, 14th, 15th, 16th, 17th, 20th, 21st, 25th, 26th, 29th, and 30th; hurricane, 4th; gale, 6th; squally, 7th, 14th, 17th, 20th, and 27th.

Wilton.—Rain 5th, 13th, 14th, 16th, 17th, 20th, and 26th; thunderstorm, 20th.

Cordeaux River.—Rain, 6th, 11th, 14th, 15th, 17th, 21st, 27th, 28th, 29th, and 30th; frost, 12th, 13th, 15th, 17th, 18th, 19th, 20th, 22nd, 23rd, 24th, and 29th; thunderstorms, 16th, 17th, 20th, and 26th; lightning, 2nd and 26th; westerly gales on the 6th and 7th.

Young.—Rain, 4th, 7th, 12th, 14th, 15th 16th, 17th, 21st, 26th, and 28th; squally, 6th and 7th; and foggy, 17th.

Wollongong.—Terrific westerly gale, 6th; and blowing strong on 7th.

Moss Vale.—Rain, 14th, 15th, 27th, 28th, and 29th; white frost, 29th; westerly gale, 25th; blowing very strong 6th and 7th.

Goulburn.—Rain, 4th, 7th, 14th, 15th, 16th, 17th, 21st, and 28th; frost, 9th; foggy, 12th; thunderstorm, 27th; lightning, 20th.

Terara.—Rain, 15th, 16th, 27th, 29th, and 30th; frost, 18th and 29th; hailstorm, 22nd; high wind, 6th.

Wagga Wagga.—Rain, 14th, 15th, 16th, 21st, 26th, and 28th.

Cape St. George.—Rain, 11th, 12th, 14th, 15th, 17th, 26th, 28th, and 30th; gales, 6th, 7th, and 21st; on the 6th it blew with hurricane force at intervals; lightning, 5th 19th, and 25th; thunderstorm, 20th; heavy sea, 22nd, 28th, 29th, and 30th; ring round moon, 23rd.

Queanbeyan.—Rain, 4th, 7th, 14th, 15th 17th, 21st, 26th, and 28th; gale on 7th.

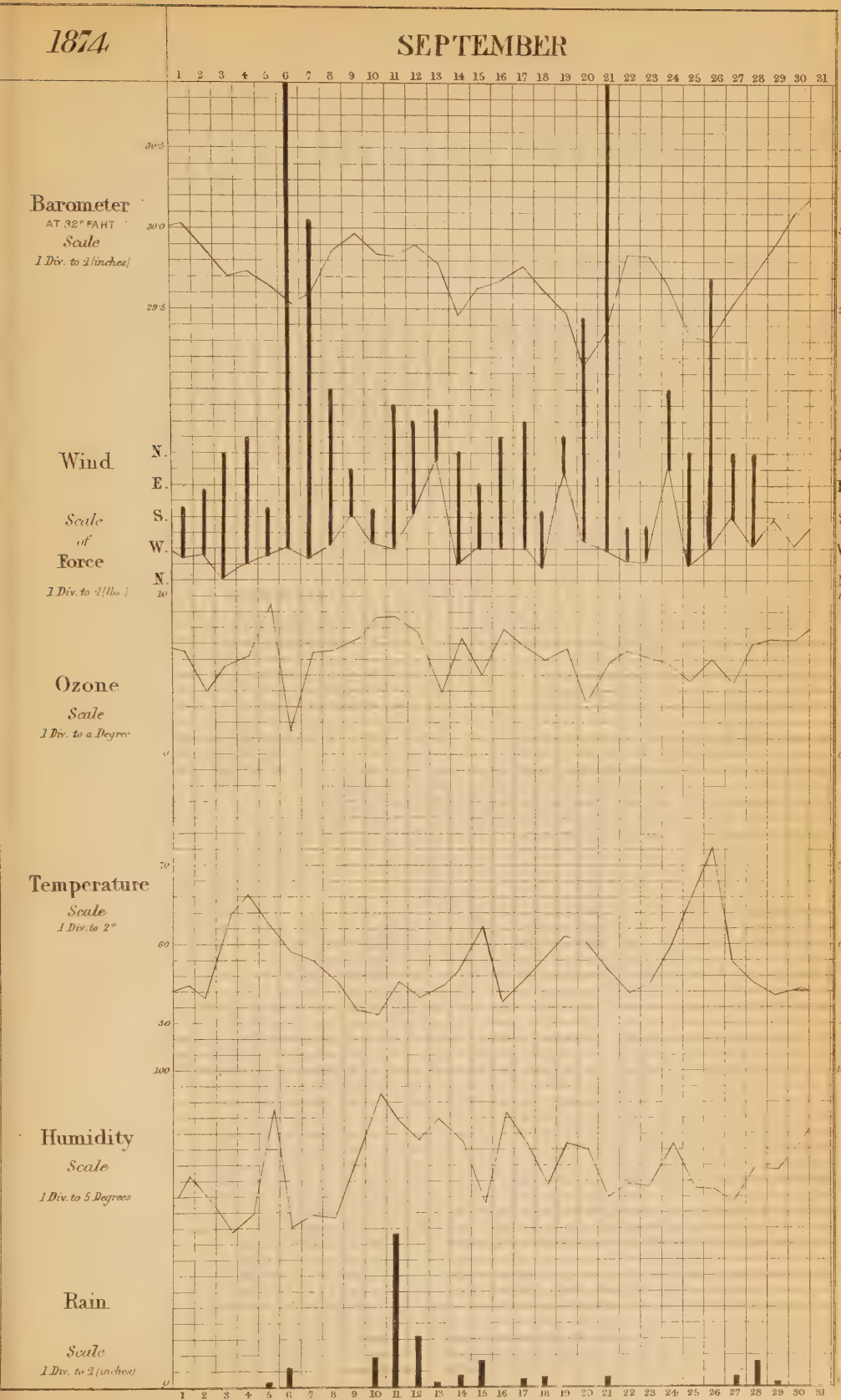
Urana.—Rain, 4th, 8th, 14th, 15th, 16th, 17th, 21st, 25th, 26th, and 27th; squally, 6th and 7th.

Denilquin.—Rain, 14th, 15th, 16th, 21st, 25th, 26th, and 28th; gales, 18th and 20th; stormy, 7th, 8th, and 21st; brilliant meteor observed, 9th.

Cooma.—Rain, 14th, 15th, 17th, and 25th.

Eden.—Rain. 8th, 14th, 15th, 16th, 17th, 21st, 22nd, 26th, 27th, 28th, 29th, and 30th; thunder squalls 19th and 25th; lightning, 6th, 8th, and 20th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Force of Wind on 6th 8. 1lbs & 21st 3.4 lbs

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF OCTOBER, 1874,

WITH APPENDIX;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

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1875.

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METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s.
Magnetic Variation 9° 32′ 22″ East.

OCTOBER, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Faht.	Highest Reading	30·290 inches on the 1st, at 8 a.m.	
	Lowest Reading	29·490 „	on the 25th, at 4 p.m.
	Mean Height	29·941	

(Being 0·099 greater than that in the same month on an average of the preceding 15 years.)

WIND	Greatest Pressure... ...	14·6 lbs.	on the 12th.
	Mean Pressure	0·7 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	N.E.	

(Prevailing direction during the same month for the preceding 15 years N.E.)

TEMPERATURE	Highest in the Shade ...	96·1	... On the 12th.
	Lowest in the Shade ...	47·3	... On the 7th.
	Greatest Range	35·6	... On the 12th.
	Highest in the Sun ...	129·7	... On the 12th.
	Highest in Black Box with Glass Top	208·8	... On the 12th.
	Lowest on the Grass ...	39·1	... On the 3rd.
	Mean Diurnal Range ...	17·7	
	Mean in the Shade ...	65·8	

(Being 2·4 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ...	Greatest Amount	100·0	... On the 1st.
	Least	28·0	... On the 31st.
	Mean	73·3	

(Being 5·5 greater than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	15 rain and 4 dew.	
	Greatest Fall	1·142 inch.	On the 21st.
	Total Fall...	2·464 inch.	65 feet above ground.
		3·876 inches.	15 inches above ground.

(Being 1·343 inches greater than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	5·574 inches.
OZONE	Mean Amount	6·8 inches.

(Being 1·7 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ...	Number of Days Lightning	5
CLOUDY SKY ...	Mean Amount	5·5
	Number of Clear Days ...	4
METEORS ...	Number Observed ...	0

REMARKS.

The weather was fine and very warm at Sydney during the month, with hot winds on 8th, 12th, 14th, and 30th. The rainfall was moderate at all stations, and the weather fine and warm, with frequent thunderstorms. On the 4th a splendid meteor was observed at Wagga Wagga and Parramatta (see Appendix). From the accounts which have been forwarded to me by Messrs. Windeyer and Betts, it appears that the former saw the meteor actually falling, while at Parramatta it was not seen until five minutes afterwards when the scroll like form had been developed.

SYDNEY, OCTOBER, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level & 32° Fah.	Wind.		Temperature.									Humidity. 0-100.	Rain.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.	Inches.	Taken at 9, 3, & 9.
1		30·437	S.	263	54·2	51·7	59·4	47·9	11·5	53·7	95·4	41·4	59·3	85·0	0·495	10·0
2	Last Qr. G.N.Dec.	·468	N.E.	147	57·3	54·3	63·1	47·6	15·5	55·4	104·9	42·4	59·8	81·7	0·255	3·3
3		·271	N.W.	186	61·6	57·0	72·7	47·6	25·1	60·2	112·7	39·1	59·6	75·3	0·001	7·0
4		·056	W.N.W.	360	61·8	57·5	76·4	52·7	23·7	64·6	116·1	44·3	59·9	75·0	0·005	10·0
5		·189	S.	270	57·6	53·1	64·2	55·0	9·2	59·6	108·6	49·6	59·0	72·7	0·120	8·0
6		·362	E.	188	58·9	53·7	64·4	52·0	12·4	58·2	108·4	46·1	59·4	71·0	0·025	3·7
7		·347	W.N.W.	213	62·5	56·7	71·1	47·3	23·8	59·2	111·6	39·6	59·7	68·7	0·001	0·0
8		·242	N.E.	182	67·8	58·8	82·2	49·7	32·5	66·0	118·0	40·1	60·3	58·3	·0	4·0
9	In Equat.	·174	W.	226	69·5	62·0	85·6	56·3	29·3	71·0	120·6	45·5	61·1	65·3	·0	0·0
10	New Moon.	·285	E.N.E.	271	64·9	59·6	69·8	54·1	15·7	62·0	108·5	46·5	61·5	71·7	·0	0·3
11		·137	W.N.W.	198	67·5	62·9	78·9	54·6	24·3	66·8	114·9	46·0	61·7	75·0	·0	0·0
12	Apogee.	·091	W.	401	75·8	63·5	96·1	60·5	35·6	78·3	129·7	47·3	62·1	53·3	·0	3·7
13		·229	E.N.E.	239	68·2	64·3	80·1	60·1	20·0	70·1	112·6	55·4	62·3	79·0	·0	0·7
14		29·981	S.S.E.	315	71·4	62·8	91·7	60·1	31·6	75·9	126·3	49·6	62·7	61·3	0·001	1·7
15		30·232	E.S.E.	227	62·4	58·3	66·8	61·1	5·7	64·0	95·1	55·1	62·5	77·3	0·001	10·0
16		·327	N.E.	356	64·7	59·9	70·1	59·7	10·4	64·9	109·1	51·2	63·1	73·3	0·028	10·0
17	G. S. Dec.	·276	N.E.	338	68·0	63·9	73·1	60·9	12·2	67·0	112·4	51·9	63·4	77·3	·0	9·3
18	Last Qr.	·326	N.E.	406	69·2	63·5	71·0	62·3	8·7	66·7	114·6	54·3	63·6	70·0	·0	4·0
19		·270	E.N.E.	320	68·3	63·1	73·4	58·6	14·8	66·0	110·1	48·5	63·3	72·3	·0	0·0
20		·089	S.	423	69·2	64·0	84·8	59·0	25·8	71·9	121·6	49·5	63·7	74·7	·0	10·0
21		·248	S.S.E.	186	60·4	57·6	63·0	58·0	5·0	60·5	81·6	55·1	63·1	82·3	1·142	10·0
22		·242	W.	107	63·0	61·2	67·0	58·5	8·5	62·8	93·6	55·0	63·3	89·0	0·003	10·0
23	In Equat.	·128	S.S.W.	179	63·5	61·8	72·6	58·3	14·3	65·5	115·2	52·9	63·5	89·0	0·001	10·0
24		·094	E.	177	66·5	64·3	74·5	61·5	13·0	68·0	109·2	58·4	63·8	87·0	0·114	10·0
25	Full Moon Perigee.	29·843	N.N.E.	414	73·5	68·8	76·1	63·9	12·2	70·0	114·1	59·4	63·6	75·0	0·474	4·0
26		·748	W.	275	66·1	63·6	75·5	65·9	9·6	70·7	112·4	60·2	64·3	86·7	0·665	10·0
27		·971	N.E.	186	64·9	60·2	70·1	57·0	13·1	63·6	110·6	48·1	64·3	74·7	0·542	3·0
28		30·145	N.E.	190	68·0	63·3	73·0	56·0	17·0	64·5	117·6	51·1	64·9	75·0	0·002	7·3
29	G.N. Dec.	·128	W.N.W.	272	67·1	63·4	72·1	61·3	10·8	66·7	112·1	54·1	65·1	79·3	0·001	4·3
30		29·999	N.E.	237	73·3	62·5	85·4	58·6	26·8	72·0	123·0	49·6	65·3	52·3	·0	2·0
31		·752	S.S.E.	406	76·7	61·1	90·3	59·7	30·6	75·0	127·8	49·8	65·5	44·7	·0	3·0
Sums or Means	.....	30·164	N.E.	8158	65·9	60·6	74·7	57·0	17·7	65·8	111·9	49·6	62·4	73·3	Sum. 3·876	5·5

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·043 above the true mean for the day.

Dew 3rd, 7th, 14th, and 28th.

SYDNEY, OCTOBER, 1874.

Date.	Evaporation. Inches.	Ozone, 0–10. Day.	Night.	Mean.	Remarks.
1	0·051	8·0	9·0	8·5	1.—Fine from about 6 p.m. until about 7 p.m. Steady rain all morning until after 11 a.m.; light rain began to fall again at 9 p.m. Light clouds in the afternoon. Cold.
2	0·107	5·5	7·0	6·3	2.—Cloudy until noon. Evening calm and dew falling.
3	0·142	5·0	7·0	6·0	3.—Cloudy and fine alternately; morning warm; like thunderstorm W. at 3 p.m. Shower from 4·20 p.m. until 4·55 p.m.
4	0·223	...	...	4·5	4.—Cloudy until 2·45 p.m. Clouds were light, and formed again 3·50 p.m. Thunderstorm S.E. from 4·15 p.m. until 4·20 p.m.; heavy shower 4·17 p.m., and lightning at 4·19 p.m. Rainbow E. at 4·25 p.m. Clouds cleared again in evening.
5	0·117	5·5	8·0	6·8	5.—Fine from 7·45 p.m. until after 10·30 p.m. Raining at 5·25 a.m.; dropping rain after 7 a.m., and began to rain again at 11·45 p m. Forenoon dull and cold.
6	0·151	6·0	7·5	6·8	6.—Fine from between 1 p.m. and 2 p.m. No clouds in evening, and dew falling, also calm. Clouds broken in forenoon.
7	0·176	5·5	7·0	6·3	7.—No clouds during day, and warm.
8	0·214	2·5	6·5	4·5	8.—Fine until after 1 p.m., and again after 6·30 p.m. Hot wind until 2 p.m. Clouds were very light all afternoon. Calm at 9 p.m.
9	0·196	7·5	9·5	8·5	9.—Cloudy at 5·35 p m., and cleared again at 7·45 p.m.; very hot. S. gale at 4·55 p.m. No clouds at 9 p.m.
10	0·184	3·5	8·5	6·0	10.—Fine. Clouds on horizon in the evening. Fresh dry breeze.
11	0·256	...	...	3·5	11.—No clouds until afternoon, when light clouds appeared along coast. Light breeze during day. Very hot.
12	0·306	7·0	6·5	6·8	12.—Fine until after 4·30 p.m. Hot wind until 3·35 p.m.; S. gale at 3·40 p.m. No clouds in the morning.
13	0·184	7·0	8·0	7·5	13.—Morning cloudy until 8·45 p.m., and again from 5·45 p.m. until 7·15 p.m. Warm during day. Evening calm, hazy, and dew falling.
14	0·305	5·5	6·5	6·0	14.—Cloudy from 3·50 p.m. until 5·30 p.m. Clouds round horizon during day. Hot wind until 12·33 p m.
15	0·060	9·0	8·0	8·5	15.—Cloudy and very dull, with light rain at intervals during day.
16	0·120	6·0	9·5	7·8	16.—Cloudy. Forenoon and afternoon dull like rain, partial clearing of clouds in the evening. Very light drops of rain at 1 p.m.
17	0·195	7·0	8·5	7·8	17.—Afternoon and evening cloudy and dull; clouds very light during forenoon. Drops of rain at intervals during evening.
18	0·179	...	...	3·3	18.—Fine from 2·30 p.m. until 4·30 p.m., and again after sunset. Light clouds after 4·30 p.m. until towards evening. Fresh breeze.
19	0·214	6·0	8·0	7·0	19.—Fine, warm, like thunderstorm S.W. in the afternoon. No clouds in the evening, and fresh breeze.
20	0·346	7·0	8·0	7·5	20.—Cloudy. Clouds very light in the forenoon, like thunderstorm all afternoon. Thunderstorm from W. at 5·55 p.m., and passed round to coast; came in again from S.E., and ended at 8·10 p.m. Another violent storm N.W. from 10·15 p.m. until about 1 a.m. Lightning vividly during storm from 6 10 p.m., and raining from 11·20 p.m.
21	0·061	8·0	8·5	8·3	21.—Cloudy and very dull, like rain. Clouds unbroken during day.
22	0·047	8·0	7·5	7·8	22.—Cloudy, dull, and almost calm; quite calm at 9 a.m.; very light drops of rain at 8·55 a.m., and at 9 p.m. Clouds got lighter in the evening.
23	.....	8·0	7·0	7·5	23.—Cloudy, drops of rain at 9·8 a.m. Dense fog all morning until about 7 30 p.m. Light thunderstorm from W. from 2·50 p.m. until 3·35 p.m. Raining from 3·33 p.m. until about 6 p.m.
24	0·050	9·0	9·5	9·3	24.—Cloudy; morning dull; began to rain at 7·15 p m., and continued until 2 a.m.
25	0·244	...	...	4·3	25.—Cloudy at 10 a.m, when light clouds formed; clouds became heavy at 4 p.m. Heavy thunderstorms, N.W. to S.E., from 4·16 p.m. until about 6·40 p.m. Lightning 4 20 p.m., and all round during storm. Raining heavily at 4·39 p m.
26	0·115	7·5	8·5	8·0	26.—Cloudy; warm; morning almost calm. Heavy thunderstorm from W. from 2·22 p.m. until 4·40 p.m. Lightning 2·41 p.m., and raining from 2·53 p.m. until 5·6 p.m.
27	0·163	7·0	7·5	7·3	27.—Morning fine until 8·50 a.m., and again after 12·40 p.m. Evening calm and dew falling.
28	0·193	7·0	9·5	8·3	28.—Light clouds, and cloudy after 9·30 a.m. Lightning N.N.W. at 7 30 p.m., and S.W. and S. at 9 p.m. Drops of rain at 9·13 p.m.
29	0·182	6·5	7·0	6·8	29.—Cloudy from 10 a.m. until about 4·45 p.m Very light thunderstorm from W., went round by S. to coast from 3·20 p.m, until 3·45 p.m. No rain. Lightning N. at 7·35 p.m., also S.S.E. and S.E.
30	0·336	4·5	5·5	5·0	30.—Cloudy from 2·45 p.m. until after 3·30 p.m. Hot wind all forenoon until after 2 p.m. Atmosphere very dry.
31	0·457	6·5	7·5	7·0	31.—Very hot wind until towards evening. Strong W. gale all forenoon. Cloudy from 10 a.m. until about 4 p.m. S. burster at 6 p.m.
Means	Sum. 5·574	6·5	7·8	6·8	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	30·254	30·290	8 a.m.	30·213	3 p.m.	11	3	1	...	6	3	...	...	...	...	...	...	...	...	...	...	263	11·0	0·6	2·6 S. 2·15 p.m.
2	30·160	30·283	9 a.m.	30·085	4 & 5 a.m.	1	...	...	...	2	...	3	4	...	3	4	3	1	1	1	1	147	6·1	0·2	0·7 N.E. 5·40 p.m.
3	29·937	30·089	9 a.m.	29·880	3, 4, 5, & 6 a.m.	...	...	...	2	5	3	6	...	1	3	4	...	...	...	...	...	186	7·7	0·3	3·1 N.N.E. 4·55 p.m.
4	29·818	29·897	12 p.m. 1 & 2 a.m.	29·712	4 p.m.	5	3	1	1	4	6	2	...	...	...	...	...	...	...	...	2	360	15·0	1·1	11·0 W. 2·42 p.m.
5	30·067	30·165	8 a.m.	29·990	4 p.m.	12	2	2	1	5	...	...	...	...	...	...	...	...	...	...	2	270	11·2	0·6	2·0 S.S.E. 3·40 p.m.
6	30·141	30·183	10 a.m.	30·102	3 p.m.	1	2	...	...	...	...	4	1	...	...	...	3	7	3	1	2	188	7·8	0·3	1·1 S.S.W. 9·55 a.m.
7	30·069	30·161	9 a.m.	34·031	4 & 5 p.m. & 3a.m	...	...	...	...	...	5	3	1	5	3	4	3	...	...	..	...	213	8·8	0·4	1·6 N.N.E. 8·10 p.m.
8	29·978	30·057	9 a.m.	29·923	4 & 5 p.m.	...	...	5	1	2	5	2	...	2	...	7	...	...	...	...	...	182	7·6	0·3	1·4 N.E. 5·0 p.m.
9	30·007	30·095	7 & 8 a.m.	29·846	3 p.m.	7	...	1	1	8	...	...	...	...	2	1	1	3	...	...	...	226	9·4	0·4	10·1 S. 5·20 p.m.
10	30·015	30·104	9 a.m.	29·966	3 & 8 a.m.	...	...	...	...	1	...	1	...	6	2	4	7	1	...	...	...	271	11·3	0·6	3·9 N.E. 4·38 p.m.
11	29·880	29·950	9 a.m.	29·824	4 p.m.	...	...	...	...	...	12	...	...	1	...	2	8	...	...	...	...	198	8·2	0·3	1·4 W. 8·25 a.m.
12	29·976	30·064	12 p.m.	29·848	3 p.m.	5	5	1	4	8	...	...	...	...	...	1	...	...	...	...	...	401	16·7	1·4	14·6 S. 5·20 p.m.
13	29·871	30·051	9 a.m.	29·778	4 a.m.	...	...	...	...	1	4	5	...	...	...	4	10	...	...	...	...	239	9·9	0·5	3·4 E.N.E. 2·15 p.m,
14	29·881	30·022	8 a.m.	29·749	3 p.m.	3	3	1	...	3	1	...	...	...	...	...	...	...	...	6	7	315	13·1	0·8	4·2 S. 3·53 p.m.
15	30·086	30·143	10 p.m. & 7 & 8 a.m.	30·028	2 p.m.	1	...	...	...	...	...	...	...	...	...	3	1	3	12	4	...	227	9·4	0·4	1·1 E.S.E. 9·20 p.m.
16	30·087	30·142	9 a.m.	30·046	4 a.m.	...	...	...	...	...	1	2	...	1	4	11	4	1	...	...	...	356	14·8	1·1	4·2 N.E. 5·5 p.m.
17	30·071	30·152	8 a.m.	30 014	3 p.m.	...	...	...	...	...	...	...	...	...	1	15	6	2	...	...	...	338	14·1	1·0	3·4 N.E. 8·5 p.m.
18	30·097	30·144	10 a.m.	30·054	4 p.m.	...	...	...	...	...	...	...	...	...	5	15	4	...	...	...	...	406	16·9	1·4	5·1 N.E. 5·20 p.m.
19	29·974	30·089	9 a.m.	29·907	3 a.m.	...	...	...	...	...	...	...	...	...	5	9	10	...	...	...	...	320	13·3	0·9	6·1 N.E. 7·40 p.m.
20	29·882	29·972	11 p.m.	29·807	3 p.m.	9	3	...	...	...	...	1	...	...	1	3	3	2	...	...	2	423	17·6	1·5	6·8 S.S.W. 9·45 p.m.
21	30·041	30·081	10 p.m.	30·011	3 a.m.	9	4	1	...	...	...	...	...	...	...	...	...	...	...	1	9	186	7·7	0·3	1·3 S.S.E. 12·22 p.m.
22	29·971	30·059	9 a.m.	29·896	4 a.m.	5	...	...	2	11	...	...	...	...	...	...	...	...	1	1	4	107	4·5	0·1	0·4 E.S.E. 12·30 p.m.
23	29·910	29·946	10 p.m.	29·876	3 a.m.	9	10	1	...	3	...	...	...	...	...	...	...	...	...	...	1	179	7·5	0·3	1·1 S.S.W. 11·40 a.m.
24	29·737	29·916	9 a.m.	29·638	3, 4, & 5 a.m.	1	1	1	...	...	...	...	...	5	3	3	2	6	1	...	1	177	7·4	0·3	1·0 N. 7·30 a.m.
25	29·559	29·668	9 a.m.	29·490	4 p.m.	...	1	...	...	...	...	...	...	3	8	5	6	1	...	...	...	414	17·2	1·5	8·8 N.E. 4·55 p.m.
26	29·624	29·753	8 a.m.	29·537	1 p.m.	...	...	1	1	9	1	1	3	...	4	2	2	...	...	...	...	275	11·5	0·6	5·8 W.S.W. 3·5 p.m.
27	29·822	29·883	11 & 12 pm & 1 am	29·758	3 p.m.	...	3	...	...	1	2	2	1	5	...	5	3	2	...	...	...	186	7·7	0·3	1·4 E.N.E. 4·50 p.m.
28	29·948	29·980	9 & 10 p.m.	29·920	4 p.m.	..	...	...	...	1	1	...	...	...	1	9	4	6	2	...	...	190	7·9	0·3	1·1 E.N.E. 5·45 p.m.
29	29·849	29·949	9 a.m.	29·817	4 & 5 p.m. & 3 a.m	...	...	...	...	1	11	...	...	...	...	2	8	2	...	...	...	272	11·3	0·6	5·1 N.E. 5·40 p.m.
30	29·727	29·824	9 a.m.	29 628	8 a.m.	...	...	...	...	6	2	4	...	...	1	8	3	...	...	...	...	237	9·8	0·5	1·8 N.N.W. 8·15 a.m.
31	29·728	29·872	8 a.m.	29·495	3 p.m.	1	...	...	7	5	...	1	2	...	...	...	...	...	...	8	406	16·9	1·4	14·0 W.	
Sums or Means.	29·941	October 1st, 30·290 8 a.m.		25th October, 24·490 4 p.m.		80	40	16	20	82	57	37	12	29	46	121	91	37	20	14	39	8158	10·9	0·7	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups records the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of October, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., October, 1874.									For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.			Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force. 0-6.	Clouds. 0-10.	Mean Max.	Mean Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·185	72·3	43·0	E.N.E.	...	...	85·3	59·2	97·5	45·7	0·450	1	0·450	26	8·085
Tenterfield	80	...	...	59·7	...	N.E.	1·1	4·7	71·8	47·5	83·0	35·0	1·460	3	0·640	27	...
Grafton	22	...	...	65·5	...	N.E.	0·9	4·1	88·2	42·8	96·0	29·0	1·320	5	0·067	27	4·496
Inverell	122	...	...	62·5	77·0	N.	0·8	1·8	74·2	50·8	81·0	38·0	2·000	2	1·500	27	...
Bourke	393	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Narrabri	196	...	...	71·9	...	N.W.	1·7	1·1	88·4	55·4	101·0	41·9	1·700	4	0·079	26	6·843
Armidale	80	3278	...	55·0	86·0	W.	1·5	2·9	67·2	42·8	82·0	34·0	1·960	5	1·150	27	4·618
Goonoo Goonoo	110	1550	30·163	62·7	60·0	S.W.	0·2	2·0	80·7	44·6	92·0	34·5	4·020	2	3·500	27	...
Port Macquarie	0	53	30·176	64·0	...	W.	1·4	3·7	71·8	56 2	78·1	46·8	3·220	9	0·990	27	6·085
Murrurundi	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	63·9	...	N.W.	0·1	0·9	77·6	50·2	90·0	35·0	2·280	7	0·700	25	2·176
Scone	78	...	...	63·5	...	S.	0·9	2·8	75·7	51·3	84·0	40·0	0·230	2	0·130	4	3·233
Muswellbrook	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	60·5	...	N.	1·1	1·4	77·9	43·0	85·0	31·2	...	...	...	...	3·141
Mudgee	121	...	...	62·2	...	W.	0·6	...	76·2	48·2	85·0	39·0	2·250	5	1·900	26	3·147
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	61·0	...	W.	1·5	4·4	75·4	46·6	88·5	33·4	2·150	7	1·070	26	3·945
Lambton	7	...	...	61·8	...	W.	1·1	...	75·2	48·4	88·0	38·0	3·740	9	1·250	26	6·398
Newcastle	1	112	30·137	64·5	72·0	N.W.	0·3	3·4	73 2	55·8	92·0	45·0	3·320	8	1·160	26	...
Orange	124	2891	...	60·7	...	N.E.	0·5	4·2	68·4	52·9	76·5	39·7	2·620	9	0·670	26	4·104
Bathurst	96	2200	30·131	56·3	65·0	S.S.E.	1·0	3·3	71·3	41·3	87·0	25·2	1·600	5	0·990	26	...
Forbes	176	...	30·249	65·5	...	N.W.	0·5	1·4	76·1	54·8	88·0	43·0	..	3	...	...	...
Kurrajong	36	1870	...	57·0	...	W.	1·2	4·4	64·9	49·0	80·0	39·0	3·950	13	0·930	24	...
Mount Victoria	61	3490	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Woodford	50	2192	30·041	60·5	...	W.	0·0	...	66·4	54·6	79·9	41·5	5·980	14	1·580	24	...
Parramatta	16	...	...	65·5	...	N.W.	0·5	1·4	77·4	53·6	89·2	44·1	3·470	11	0·940	25	...
South Reef	0	...	...	...	...	S.E.	1·1	5·0	...	...	...	...	3·090	10	0·710	1	...
Sydney	5	155	30·164	65·8	73 3	N.E.	0·7	5·5	74·7	57·0	96·1	47·3	3·876	15	1·142	21	5·574
Liverpool	16	...	30·141	62·3	...	S.	0·1	4·5	73·9	50·6	89·0	38·0	2·698	14	0·810	27	...
Wentworth	476	...	...	68·7	...	W.	2·2	3 0	82·4	54·9	97·6	42·3	0·520	4	0·290	20	10·134
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	2·350	5	0·940	24	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	3·140	11	0·970	27	...
Young	140	...	...	64·7	...	N.E.	0·1	1·1	77·2	52·2	88·0	44·0	1·020	4	0·410	*	4·601‡
Wollongong	0	...	...	64·0	...	E.S.E.	1·2	...	73·7	54·2	88·0	47 5	...	...	...	...	...
Moss Vale	31	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Goulburn	54	2129	30·173	60·2	71·0	W.N.W.	0·0	4·1	74·1	46·3	87·4	32·8	1·560	4	0·920	26	3·942
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	65·8	...	W.	0·3	...	78·4	53·1	92·0	43·0	1·650	3	1·000	21	6·759
Cape St. George	0	175	30·140	62·7	75·0	S.	1·8	5·1	69·2	56·1	80·0	46·0	0·590	8	0·240	25	...
Queanbeyan	60	...	...	63·1	...	N.N.W.	0·9	3·9	78·6	47·6	87·0	38·0	1·260	2	1·200	26	3·849
Urana	218	...	...	67·3	...	N.N.E.	1·1	3·0	80·9	53·6	97·0	42·0	0·460	1	0·460	26	4·741
Deniliquin	287	410	30·160	63·0	59·0	S.W.	1·6	1·9	83·0	42·9	100·0	30·0	1·500	1	1·500	26	...
Kiandra	88	4640	30·018	50·1	60·0	N.E.	1·7	3·5	73·9	26·3	85·0	15·0	0·200	2	0·100	†	...
Albury	175	572	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cooma	52	2637	...	57·4	...	W.	1·1	4·0	74·6	40·1	90·0	29·0	0·660	4	0·310	26	2 386
Eden	0	107	30 109	60·4	77·0	S.W.	1·4	5·5	67·6	53·2	80·0	43·0	1·440	11	0·760	25	...

* 23rd and 25th. † 6th and 24th. ‡ This amount of evaporation is only for 25 days.

Arranged in order of latitude, with distance from the coast and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Rain, 26th; thunderstorms, 23rd and 25th; lightning, 7th, 8th, 15th, 23rd, and 27th; hurricanes, 4th, 16th, and 26th; hot wind, 15th and 17th.

Tenterfield—Rain, 2nd, 6th, and 27th.

Grafton—Rain, 1st, 2nd, 6th. 22nd, and 27th; thunderstorm during night on 27th.

Inverell—Rain, 18th and 27th.

Narrabri—Rain, 2nd, 25th, 26th, and 27th; storms, 24th, 25th, and 26th.

Armidale—Rain, 5th, 6th, 26th, 27th, and 30th.

Goonoo Goonoo—Rain, 6th and 27th; thunderstorms, 5th and 17th; lightning, 26th.

Port Macquarie—Rain, 1st, 2nd, 3rd, 5th, 6th, 7th, 16th, 27th, and 30th; thunderstorms, 1st, 4th, 5th, 23rd, 25th, 26th, and 29th; lightning, 1st, 4th, 5th, 20th, 26th, 29th, and 31st; hot wind, 31st; bright meteor, 28th.

Cassilis—Rain, 1st, 5th, 23rd, 24th, 25th, 26th, and 27th; thunderstorms, 4th, 5th, 17th, 22nd, 23rd, 24th, and 25th; lightning, 5th, and 17th.

Scone—Rain, 1st and 4th; thunderstorms, 4th and 5th; rainbow, 4th; heavy dew, 3rd. (No observations after 22nd—Observer absent.)

Dubbo—Rain, 25th and 26th.

Mudgee—Rain, 1st, 23rd, 24th, 26th, and 27th; heavy storms, 24th and 25th; dense fog, 3rd; luna corona evening of 19th.

West Maitland—Rain, 2nd, 5th, 6th, 24th, 26th, 27th, and 30th; heavy thunderstorm, 25th; thunderstorm also on the 26th.

Lambton—Rain, 1st, 5th, 6th, 21st, 24th, 25th, 26th, 27th, and 30th; heavy thunderstorm on 24th; thunderstorms also 25th and 26th; lightning with each day's storm.

Newcastle—Rain, 1st, 2nd, 5th, 6th, 24th, 25th, 26th, and 27th; heavy sea on the 1st.

Orange—Rain, 1st, 6th, 17th, 18th, 23rd, 24th, 25th, 26th, and 27th; thunderstorms, 17th, 22nd, 23rd, and 25th; hailstorm on 22nd; lightning, 4th, 19th, 20th, 21st, 29th, and 30th; slight frost on 28th.

Bathurst—Rain, 19th, 23rd, 24th, 26th, and 27th; heavy storm on 24th from W.; stormy during day on 25th and 26th; lightning, 22nd and 23rd.

Forbes—Showery, 17th and 25th; thunderstorm and raining on 26th; stormy on 25th.

Kurrajong—Rain, 1st, 2nd, 5th, 15th, 17th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, and 29th; thunderstorms, 4th, 17th, 23rd, 25th, 26th, and 29th; hailstorm, 26th and 29th; heavy dew, 3rd.

Mount Victoria—Observer absent.

Woodford—Rain, 1st, 2nd, 5th, 15th, 16th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 29th, and 30th; hailstorms, 4th, 20th, 23rd, and 29th; thunderstorms, 19th, 20th, 23rd, 25th, 26th, 27th, 28th, and 29th; foggy, 18th; lightning, 28th.

Parramatta—Rain, 1st, 2nd, 3rd, 5th, 16th, 21st, 24th, 25th, 26th, 27th, and 29th; thunderstorms, 4th, 21st, 24th, and 28th.

South Reef—Rain, 1st, 2nd, 5th, 6th, 16th, 21st, 24th, 25th, 26th, and 27th; thunderstorms, 4th, 20th, 23rd, 25th, 26th, and 29th; hot wind and W. gale, 30th; hot N.-W. wind and strong S. on 12th.

Sydney—Rain, 1st, 2nd, 5th, 6th, 15th, 16th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, and 29th; dew, 3rd, 7th, 14th, 28th; thunderstorms, 4th, 20th, 23rd, 25th, 26th, and 29th; lightning, 4th, 20th, 25th, 26th, 28th, and 29th; rainbow, 4th; hot wind, 8th, 12th, 14th, 30th, and 31st; gales, 9th, 12th, and 31st; foggy, 23rd.

Liverpool—Rain, 1st, 2nd, 4th, 5th, 15th, 16th, 18th, 21st, 22nd, 24th, 25th, 26th, 27th, and 29th; W. squalls, 3rd and 19th; thunderstorms, 4th, 17th, 20th, 23th, 25th, 26th, and 29th; lightning, 4th, 17th, 20th, and 29th; foggy, 7th, 18th, and 19th.

Wentworth—Rain, 19th, 20th, 24th, and 25th; thunderstorms, 19th and 25th; lightning, 18th and 25th; hot wind, 12th and 13th; gales, 13th and 25th.

Wilton—Rain, 20th, 23rd, 24th, 25th, and 26th; thunderstorms, 25th and 26th.

Cordeaux River—Rain, 1st, 2nd, 16th, 20th, 22nd, 23rd, 24th, 25th, 26th, 27th, and 30th; thunderstorm, 3rd, 17th, 21st, 25th, 26th, and 29; hailstorm, 29th.

Young—Rain, 18th, 21st, 23rd, and 25th. * This amount of evaporation is only for 25 days.

Wollongong—Hazy on the 22nd. No rain-gauge at this station.

Goulburn—Rain, 21st, 23rd, 26th, and 27th; lightning, 30th.

Wagga Wagga—Rain, 21st, 25th, and 26th; severe thunderstorms and vivid lightning, 20th.

Cape St. George—Rain, 1st, 4th, 21st, 23rd, 25th, 26th, 27th and 29th; thunderstorms, 25th, also two on 26th; lightning, 4th, 13th, 19th, 26th, and 28th; S.W. squalls, 9th and 12th; W. gale, 31st; fog, 23rd; rainbow, 3rd; and light dew on the 9th.

Queanbeyan—Rain, 19th and 26th; splendid meteor, S. to W., on the 4th, burst above horizon and remained visible for 25 minutes.

Urana—Rain, 26th.

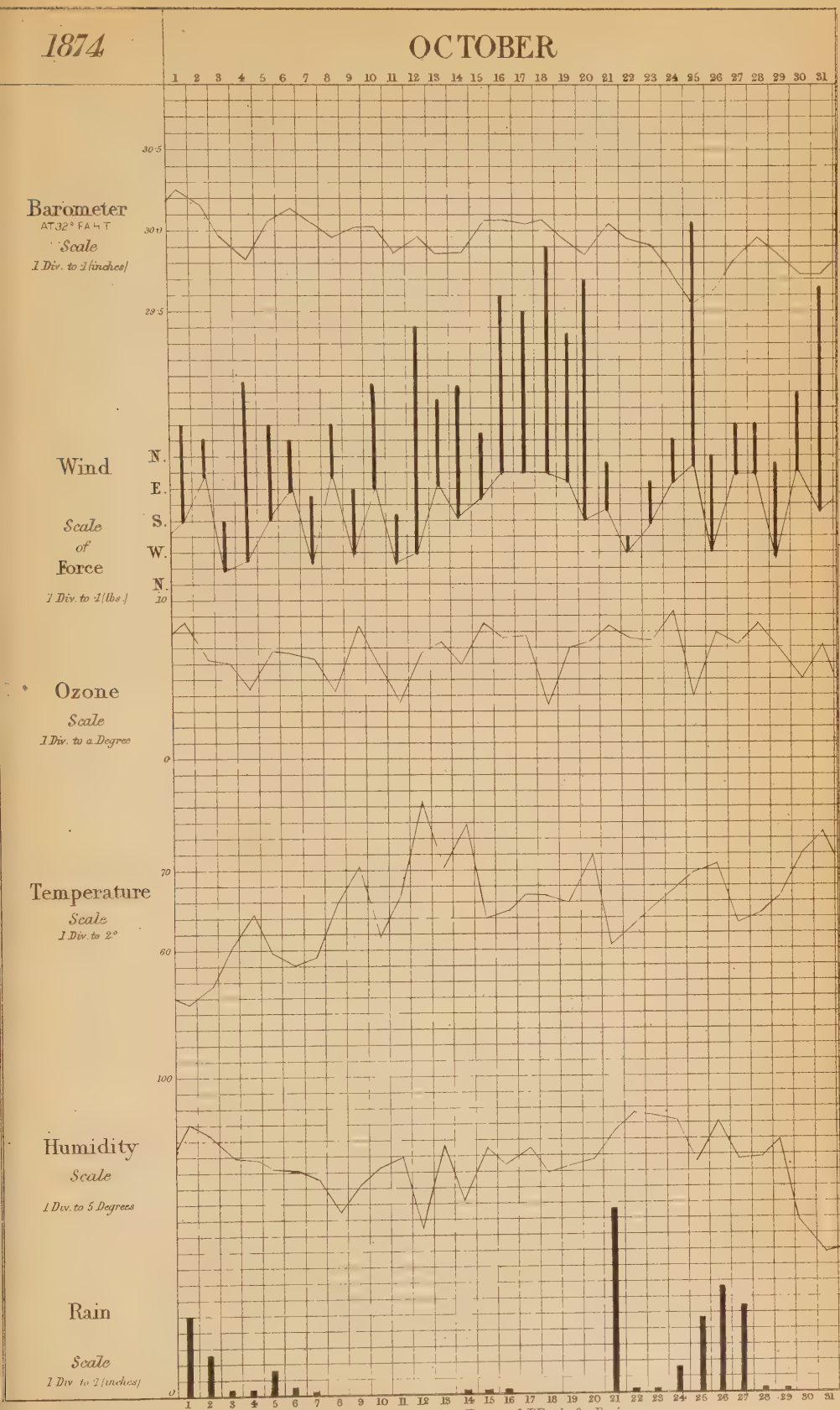
Deniliquin—Rain, 26th; stormy, 16th and 20th; hazy, 15th; light rain on 20th.

Kiandra—Rain, 6th and 24th; heavy thunderstorm on 12th, and lightning on 12th and 21st.

Cooma—Rain, 21st, 23rd, 24th, and 26th; foggy on the 10th.

Eden—1st, 4th, 5th, 17th, 18th, 23rd, 24th, 25th, 26th, 27th, and 28th; thunder squalls, 3rd, 4th, and 17th; thunder, 25th and 31st; lightning, 13th, 19th, and 20th; thick fog, 18th and 19th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office Sydney.

Dew fell 3rd 7th 14th & 28th

APPENDIX TO METEOROLOGICAL OBSERVATIONS FOR OCTOBER, 1874.

Copy of reports sent to Government Astronomer about the remarkable Meteor of October, 1874.

While at Wagga Wagga, 235 miles S.-W. of Sydney, on the 4th October, 1874, my attention was attracted to the most beautiful phenomenon that I ever witnessed. At 6h. 33m. p.m. I saw a brilliant luminous body falling in the western sky, almost directly under the planet "Venus," which was then shining brightly; it travelled obliquely from south to north at an angle of about 45 degrees.

The curious part of the appearance was that the body in falling left behind it a bright luminous track, which remained as it were fixed in the heavens after the meteor had disappeared.

It was a most beautiful object, looking like a permanent scroll of lightning in the sky, quite as bright as Venus, and extending one half of the space between the planet and the horizon, with a fainter and almost imperceptible line of light extending upwards. (Diagram 1.)

The bright part retained its brilliance for nearly four minutes by the watch, when it gradually faded into a white fleecy cloud-like matter having the appearance of white smoke, this I observed for twelve minutes and was then obliged to leave it. As the luminous appearance changed into the smoke-like matter it developed into a most beautiful scroll form (see diagram 2), evidently produced by the revolution of meteor on its axis when falling.

I may mention that when I saw it falling it gave me the idea that it was tumbling over and over. The smoke-like matter appeared to me to be driven by the wind from the west.

W. C. WINDEYER,
Barrister-at-Law.

While at Parramatta, 15 miles west of Sydney, I saw at 6h. 38m., on the evening of the 4th October, what I took to be a very large flash of lightning, but on looking at it for a few moments I found that it was stationary.

The phenomenon presented the appearance of a silver ribbon or band coming down nearly to the horizon in a zig-zag manner, and at an angle generally of about 45 degrees or thereabouts, clearly defined and the angles very sharp and pointed.

The breadth of the band at the horizon was about twice the diameter of Venus, and gradually tapering upwards in proportion to the altitude till it assumed the appearance of a fine silver thread or crack in the sky.

Just about the horizon, say 4 or 5 degrees, there was a thick black cloud, and between this cloud and the horizon, and in the brightest of the twilight the band appeared very brilliant and beautiful.

A short space above the cloud, say 3 or 4 deflections of the band, the zig-zag streaks ceased, and it could then be traced by a fine line slightly sinuous, with small bright luminous spots upon it at intervals. It appeared to me like a silver thread with knots in it that looked about the size of a small star.

After watching it thus for about six or eight minutes, I observed that the lower part was gradually changing in appearance, and that the bottom edges of the zig-zag streaks were getting as it were fringed and the whole decreasing in lustre; this was more particularly noticeable near the horizon.

This fringed appearance lasted for about five minutes and I then noticed that the angular points were becoming brighter and larger as the band itself became indistinct. It seemed to me that the light was leaving the middle of the streaks and making towards the angles of the zig-zag till at last these angles looked like so many globules of light, the lower ones being about the size of Venus, and gradually decreasing in size as they went upwards along the line. Whilst these lights at the angular points were visible the streaks themselves were undefined, but still the line could be followed down with the naked eye.

The whole thing slowly faded and at last became lost to view a few minutes before 7 o'clock.

I may state that after the light thickened at the angles, and when the lower part became indistinct, the long silver thread could be traced upwards in the sky by means of a pair of field glasses; but the whole phenomenon seemed to me to disappear almost simultaneously.

I enclose you a sketch of the phenomenon (see diagram 3) and its approximate position with reference to a few stars that I could see at the time.

ARTHUR C. BETTS.
Surveyor.

Venus
Horizon
Venus
Horizon
CLOUD
Venus
BEARING MAGNETIC NEAR HORIZON S 63° W
ALTITUDE OF UPPER LIMIT 25° ABOUT

№1 №2 №3

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS,

FOR THE

MONTH OF NOVEMBER, 1874;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

Published by authority of Her Majesty's Government in New South Wales.

SYDNEY: THOMAS RICHARDS, GOVERNMENT PRINTER.

1875.

[*Price*, 6*d*.] 4*q* 4—75

METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s
Magnetic Variation 9° 32′ 22″ East.

NOVEMBER, 1874.

GENERAL ABSTRACT.

BAROMETER ... At 32° Fah. { Highest Reading ... ... 30·083 inches on the 25th, at 8 a.m.
Lowest Reading ... ... 29·281 „ on the 21st, at 5 a.m.
Mean Height ... ... 29·752

(Being 0·086 inches less than that in the same month on an average of the preceding 15 years.)

WIND ... ... Great Pressure ... ... 12·5 lbs. On the 21st.
Mean Pressure ... ... 0·7 lb.
Number of Days Calm ... 0
Prevailing Direction ... N.E.

(Prevailing direction during the same month for the preceding 15 years, S.)

TEMPERATURE Highest in the Shade ... 93·8 ... On the 21st.
Lowest in the Shade ... 52·0 ... On the 10th.
Greatest Range ... ... 32·6 ... On the 21st.
Highest in the Sun ... 132·5 ... On the 5th.
Highest in Black Box with Glass Top ... ... 204·2 ... On the 20th.
Lowest on the Grass ... 43·7 ... On the 10th.
Mean Diurnal Range ... 17·4
Mean in the Shade ... 67·5

(Being 1·3 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ... Greatest Amount ... ... 95·0 ... On the 24th.
Least ... ... 24·0 ... On the 22nd.
Mean ... ... 65·2

(Being 4·6 less than that of the same month on an average of the preceding 15 years.)

RAIN ... ... Number of Days ... ... 8 rain.
Greatest Fall ... ... 1·715 inch. On the 25th.
Total Fall ... ... { 2·596 inches. 65 feet above ground.
3·330 inches. 15 inches above ground.

(Being 0·352 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION Total Amount ... ... 7·541 inches.

OZONE ... ... Mean Amount ... ... 6·3

(Being 1·4 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ... Number of Days Lightning 5

CLOUDY SKY ... Mean Amount ... ... 6·3
Number of Clear Days ... 1

METEORS ... Number Observed 1

REMARKS.

The weather in Sydney during the month was dry and hot, and with but little rain, except on the 17th and 25th, and no rain at all fell from the 1st to 11th. The temperature on five days during the month was over 90°, but there was very little thunder and lightning.

At the Country Stations the rainfall was generally light, with the exception of the Coast Stations between Port Macquarie and Sydney, and the weather hot and dry; thunderstorms, however, were not so frequent as usual.

SYDNEY, NOVEMBER, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level.	Wind.		Temperature.									Humidity. 0-100.	Rain. Inches.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.		Taken at 9,3 & 9.
1	Last Qr.	30·088	E.	192	66·0	53·7	71·5	56·0	15·5	63·8	116·7	46·9	65·3	44·0	·0	1·0
2		29·954	N.E.	414	74·9	64·7	87·3	56·2	31·1	71·8	114·6	47·0	65·1	55·3	·0	6·7
3		·902	W.	201	79·5	66·3	90·5	66·9	23·6	78·7	127·9	63·4	65·5	51·3	·0	10·0
4		30·045	E.N.E.	293	79·4	65·1	90·6	61·5	29·1	76·1	124·0	50·2	65·8	43·7	·0	7·3
5		29·714	S.S.E.	326	73·7	63·9	92·3	69·6	22·7	81·0	132·5	55·9	65·6	59·3	·0	10·0
6	In Equat.	30·112	E.N.E.	304	67·1	62·0	72·1	62·7	9·4	67·4	116·2	57·1	65·9	73·0	·0	3·3
7		29·993	S.E.	147	66·1	61·1	73·8	60·1	13·7	67·0	113·9	53·1	65·1	72·7	·0	3·3
8	Apogee.	·940	W.	349	69·6	63·0	77·1	58·5	18·6	67·8	120·4	52·0	65·5	66·0	·0	10·0
9	New Moon.	·819	S.	362	63·5	54·9	71·7	57·4	14·3	64·6	112·4	51·3	65·6	57·7	·0	1·0
10		30·001	S.S.W.	461	61·7	55·2	66·4	52·0	14·4	59·2	108·6	43·7	65·9	65·0	·0	5·7
11		·127	E.S.E.	140	60·9	56·2	67·4	54·6	12·8	61·0	113·3	49·8	65·5	73·0	0·051	7·3
12		·026	N.E.	351	66·8	62·1	72·2	55·9	16·3	64·1	111·3	46·1	65·7	74·0	0·005	3·0
13	G. S. Dec.	29·907	N.E.	439	70·6	64·8	77·5	59·1	18·4	68·3	115·8	49·1	65·9	70·7	·0	0·0
14		·736	S.S.W.	356	68·4	65·2	77·1	63·5	13·6	70·3	121·6	57·1	65·6	82·3	·0	9·0
15		30·108	E.	135	62·0	57·0	67·6	57·3	10·3	62·5	113·5	52·1	65·5	71·0	0·245	10·0
16		·138	E.N.E.	294	67·3	62·9	72·2	57·9	14·3	65·1	112·4	48·5	65·8	76·0	·0	10·0
17	First Qr.	29·992	W.	158	64·0	60·6	69·1	58·3	10·8	63·7	118·6	55·1	65·9	81·0	0·832	9·0
18		·877	N.E.	254	63·1	62·5	71·3	56·0	15·3	63·7	112·3	49·4	65·7	75·7	·0	3·7
19		·805	E.N.E.	191	69·0	61·9	76·1	60·1	16·0	68·1	115·4	49·2	65·8	65·3	·0	2·0
20	In Equat.	·842	S.	237	74·0	62·7	87·1	59·1	28·0	73·1	125·9	51·3	65·6	54·7	·0	4·3
21		·906	N.	342	74·5	64·7	93·8	61·2	32·6	77·5	126·6	54·1	65·9	58·7	·0	8·0
22		·466	S.S.E.	232	91·2	65·5	93·0	67·0	26·0	80·0	117·2	57·0	66·5	24·0	·0	10·0
23	Perigee.	·991	S.S.E.	245	62·8	55·5	69·0	60·8	8·2	64·9	110·4	54·1	66·7	61·7	·0	10·0
24	Full Moon.	30·124	S.	205	56·6	54·8	60·8	59·1	1·7	60·0	83·3	54·1	66·3	88·7	0·003	10·0
25		·229	S.	255	60·0	56·3	66·3	52·1	14·2	59·2	105·6	48·6	66·3	78·0	1·715	6·0
26	G. N. Dec.	·198	N.N.E.	195	54·9	60·1	71·2	54·1	17·1	62·7	116·4	47·0	66·4	71·3	0·045	9·7
27		29·879	E.	438	67·1	62·6	74·8	59·8	15·0	67·3	119·3	52·4	66·3	76·3	·0	7·3
28		·865	N.E.	207	63·3	56·6	72·1	54·6	17·5	63·4	114·7	47·9	66·6	64·0	0·434	0·7
29		·882	W.	125	66·3	56·2	77·7	53·6	24·1	65·7	118·7	45·6	66·9	51·0	·0	5·0
30		30·040	N.E.	239	69·1	63·6	74·5	56·5	18·0	65·5	115·5	49·8	66·7	70·7	·0	6·0
Means	.....	29·957	N.E.	8,087	68·1	60·7	76·1	58·7	17·4	67·5	115·8	51·3	65·9	65·2	Sum. 3·330	6·3

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.
The Barometer at 9 a.m. reads 0·029 above the true mean for the day.

SYDNEY, NOVEMBER, 1874.

Date.	Evaporation. Inches.	Ozone, 0-10. Day.	Night.	Mean.	Remarks.
1	0·242	...	...	3·5	1.—Morning cloudy until 8·50 a.m, and again from about 11 a.m. until towards evening the clouds were very light. Warm.
2	0·338	5·0	6·0	5·5	2.—Fine after 7 p.m. Morning dull; light clouds rest of day. Hot wind all afternoon and evening. Lightning N.W. at 8 21 p.m.
3	0·288	4·0	5·0	4·5	3.—Cloudy, clouds light. Hot wind until about 5·45 p.m. Lightning N.E. to S. at 7 50 p.m., and during evening.
4	0·410	5·0	6·5	5·8	4.—Fine towards evening. Clouds during day very light. Very warm.
5	0·321	6·0	6·5	6·3	5.—Cloudy, very hot, light clouds during forenoon; afternoon and evening dull, like rain.
6	0·242	6·5	8·5	7·5	6.—Forenoon cloudy until between 1 p.m. and 2 p.m. No clouds at 3 p.m.
7	0·201	5·0	8·0	6·5	7.—Fine after 12·15 p.m. Fresh breeze in the afternoon and evening.
8	0·266	...	...	3·8	8.—Cloudy. Clouds broken in the morning; evening very dull, and dropping rain at 1·44 p.m., 5·27 p.m., and 5·36 p.m.
9	0·384	7·0	9·0	8·0	9.—Cloudy at 5·30 p.m. until between 7 p.m. and 8 p.m. Fresh breeze.
10	0·345	6·5	9·0	7·8	10.—Cloudy and fine alternately. Very cool.
11	0·140	7·0	8·5	7·8	11.—Fine from 6 p.m. until 8·30 p.m. Morning showery. Very cool throughout day, and almost calm at 9 p.m.
12	0·248	6·0	7·5	6·8	12.—Morning cloudy until about 10·30 a.m., clouds were broken. Strong breeze in the evening and no clouds.
13	0·313	6·5	7·0	6·8	13.—Fine, warm. Fresh dry breeze blowing strong in afternoon and evening, and no clouds; also hazy.
14	0·205	8·0	9·5	8·8	14.—Cloudy. Thunderstorm W. from 1·18 p.m. until 4 p.m. Raining from 1·30 p.m. until about 5·30 p.m. Lightning at 1·47 p.m. Calm at 9 p.m.
15	0·196	...	...	4·3	15.—Fine from about 2·30 p.m. until after 5 p.m. Morning dull. Showers at 8·35 a.m. Cool.
16	0·202	5·5	8·0	6·8	16.—Fine from 10·30 a.m. until about 1·30 p.m. Morning dull and calm, evening dull and dropping rain at intervals from 8·5 p.m. Lightning N.W. 8·18 p.m., and all round after 10 p.m.
17	0·143	7.0	8·0	7·5	17.—Fine from about 4 p m. until after 5·30 p.m. Very light rain in the morning. Clouds became lighter about 1·30 p.m. Lunar ring all evening about 40° diameter. Very low rumbling of thunder at 4·42 p.m. and 5·33 p.m. W.
18	0·261	6·5	7·5	7·0	18.—Cloudy from between 1 p m and 2 p.m. until about 6 p.m. Dull like thunderstorm at 3 p.m. Calm at 9 p.m. Bright meteor N.E. to S.W. at 8·20 p.m., altitude 75°, magnitude 2nd, and lasted 2 seconds.
19	0·262	6·5	7·0	6·8	19.—Fine from 1·30 p.m. until about 7·30 p.m., and again for awhile after 8·30 p.m. Calm at 9 p.m.
20	0·316	6·0	7·5	6·8	20.—Cloudy and very warm until after 2 p.m. S. burster at 4 55 p.m.
21	0·373	4·0	4·0	4·0	21.—Cloudy. Morning dull like rain, and turned fine for awhile between 1 p.m. and 2 p.m. Hot wind at 5 p.m.
22	0·211	...	...	3·8	22.—Cloudy. Strong and very hot wind all morning until 10.10 a.m. Dropping rain at 5·31 p.m. Evening dull.
23	0·239	6·0	6·5	6·3	23.—Cloudy. Afternoon and evening dull like rain. Very light drops of rain at 8·7 p.m.
24	...	8·0	9·0	8·5	24.—Cloudy. Dropping rain 8·40 a.m. to 9 a.m.; then a smart shower, and began to drop again; afterwards a steady rain until 4 a.m. following morning.
25	0·155	7·0	7·5	7·3	25.—Cloudy until about 5·20 p.m.; afterwards cloudy and fine alternately. Morning showery from 8·53 until 11 a.m.
26	0·158	6·5	7·5	7·0	26.—Cloudy and dull until evening, when clouds became light. Light shower at 8 a.m.
27	0·298	7·0	8·0	7·5	27.—Fine until 11·15 a.m. and warm. Thunderstorm from W. at 2 p.m., passed over to coast and came in again at 3·15 p.m., and ended at 4·40 p.m. Lightning S. at 2·56 p.m., and heavy rain 3·30 p.m. Another heavy thunderstorm from W. at 6·55 p.m. until 8·2 p.m. Lightning vividly during storm from 7·2 p.m. all round. Very heavy shower 7·15 p.m., with hail as large as marbles. South gale after storm.
28	0·264	6·5	8·0	7·3	28.—Fine, warm. No clouds at 9 p.m.; calm, and light dew falling.
29	0·273	...	...	3·8	29.—Fine; atmosphere very clear all day.
30	0·247	6·0	6·5	6·3	30.—Fine from about 11·30 a.m. until about 5·15 p.m. Fresh breeze. Calm at 9 a.m.
Means	Sum. 7·541	6·2	7·4	6·3	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at9 p.m. and 9 a.m. respectively.

NOVEMBER, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																			
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.
1	29·856	29·919	9 p.m.	29·784	8 a.m.	2	...	...	1	...	...	1	4	4	1	3	1	6	1	...	...	192	8·0	0·3	1·6 E. 6·15 p.m.
2	29·598	29·784	9 a.m.	29·500	4 & 5 p.m.	...	...	...	...	...	2	2	6	3	4	6	1	...	...	...	...	414	17·2	1·5	5·8 N.E. 2·20 p.m.
3	29·760	29·844	8 a.m.	29·646	3 p.m.	3	5	1	2	11	...	1	...	...	...	...	1	...	...	...	...	201	8·4	0·3	7·2 W. 3·37 p.m.
4	29·676	29·873	9 a.m.	29·508	5 a.m.	...	...	...	...	...	...	3	...	4	1	5	7	4	...	...	...	293	12·2	0·7	4·2 N.W. 8·53 p.m.
5	29·786	29·926	8 a.m.	29·543	10 a.m.	4	...	...	1	...	...	1	...	...	...	...	1	2	3	3	9	326	13·6	0·9	5·8 W.S.W. 9·55 a.m.
6	29·792	29·933	9 a.m.	29·747	4 a.m.	1	...	1	...	1	1	1	...	1	5	2	7	4	...	...	...	304	12·6	0·8	5·8 E.N.E. 4·20 p.m.
7	29·828	29·909	9 p.m.	29·786	1, 2 & 4 p.m.	1	2	...	5	4	...	...	...	...	...	...	...	...	...	6	6	147	6·1	0·2	1·8 N.N.E. 9·15 a.m.
8	29·629	29·771	9 a.m.	29·565	10 & 11 p.m.	4	1	1	...	8	...	...	...	...	1	2	4	1	...	...	2	349	14·5	1·1	9·7 W. 6·15 p.m.
9	29·702	29·801	8 a.m.	29·589	3 p.m.	8	4	1	8	1	1	...	...	...	...	...	...	...	...	...	1	362	15·1	1·1	5·1 S. 5·25 p.m.
10	29·860	29·925	8 a.m.	29·810	12 a.m.	9	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	461	19·2	1·8	7·2 S. 2·5 p.m.
11	29·875	29·949	9 a.m.	29·832	3 a.m.	4	1	...	...	...	...	3	3	1	...	...	...	1	7	3	1	140	5·8	0·2	1·3 S. 11·37 a.m.
12	29·737	29 845	9 a.m.	29·706	4 & 5 p.m., & 3 & 4 a.m.	...	...	...	...	...	...	...	...	...	3	12	9	...	...	...	...	351	14·6	1·0	6·8 N.E. 4·45 p.m.
13	29·623	29·734	9 a.m.	29·574	4, 5, 6 & 8 a.m.	...	...	...	...	...	...	...	...	...	1	12	7	4	...	...	...	439	18·3	1·7	12·0 N.E. 4·43 p.m.
14	29·669	29·908	8 a.m.	29·468	2 p.m.	1	8	3	...	...	1	...	...	1	1	4	4	1	...	...	...	356	14·8	1·1	8·4 N.E. 1·20 p.m.
15	29·949	29·991	9 p.m.	29·911	3 & 5 p.m.	3	1	...	...	...	...	...	...	...	...	...	...	9	7	2	2	135	5·6	0·2	1·1 S.E. 12·35 p.m.
16	29·843	29·961	9 a.m.	29·802	5 p.m.	2	1	1	...	...	...	...	...	...	...	...	9	6	2	2	1	294	12·2	0·7	4·5 E.N.E. 4·15 p.m.
17	29·737	29·818	9 a.m.	29·680	3 & 4 a.m.	1	1	1	1	9	...	...	...	...	...	...	...	...	1	7	3	158	6·6	0·2	1·3 S.E. 4·45 p.m.
18	29·606	29·697	9 a.m.	29·581	3, 4 & 5 p.m.	...	...	...	6	3	...	1	...	1	5	6	2	...	...	...	...	254	10·6	0·6	3·4 W.S.W. 8·45 a.m.
19	29·644	29·685	9 p.m.	29·596	3 p.m.	...	...	1	1	...	...	7	...	...	...	...	9	6	...	..	...	191	8·0	0·3	1·8 E. 1·55 p.m.
20	29·717	29·811	9, 10, & 11 p.m.	29·589	3 p.m.	6	...	5	1	6	2	1	...	...	...	...	...	1	...	...	2	237	9·8	0·5	3·6 S. 5·7 p.m.
21	29·465	29·734	9 a.m.	29·282	5 a.m.	...	...	...	...	3	5	2	1	6	5	2	...	...	...	...	...	342	14·2	1·0	12·5 W. 8·45 a.m.
22	29·596	29·800	8 a.m.	29·297	9 a.m.	6	2	...	...	2	...	...	...	...	...	...	...	...	...	1	13	232	9·6	0·5	3·1 S.S.E. 11·20 a.m.
23	29·911	29·984	10 p.m.	29·810	9 a.m.	5	...	1	...	...	...	...	...	...	...	...	...	...	...	3	15	245	10·2	0·5	2·6 S.S.E. 11·40 a.m.
24	29·962	30·034	8 a.m.	29·919	5 p.m.	14	1	...	2	...	...	...	...	...	...	...	...	...	...	1	6	205	8·5	0·3	1·8 S.S.E. 1·35 a.m.
25	30·037	30·083	8 p.m.	30·000	3 a.m.	13	5	...	2	4	...	...	...	...	...	...	...	...	...	...	...	253	10·6	0·6	3·1 S. 12·55 p.m.
26	29·862	30·016	9 a.m.	29·739	8 a.m.	...	...	...	...	...	...	...	...	..	7	5	2	6	1	2	1	195	8·1	0·3	2·0 N.E. 12·40 a.m.
27	29·626	29·704	7 & 9 a.m.	29·500	3 p.m.	...	...	...	...	...	...	...	...	...	...	1	3	5	2	...	...	438	18·2	1·7	8·4 10·25 p.m.
28	29·670	29·709	8 a.m.	29·609	2 p.m.	...	...	...	4	3	1	5	1	2	...	6	2	...	...	...	...	207	8·6	0·3	2·0 E.N.E. 1·35 p.m.
29	29·758	29·861	8 a.m.	29·671	2 p.m.	...	...	...	2	7	3	...	...	...	...	...	...	..	6	5	1	125	5·2	0·1	1·0 E.S.E. 3·45 p.m.
30	29·791	29·861	9 a.m.	29·748	4 a.m.	...	...	...	...	1	...	..	...	...	...	12	2	7	2	...	...	239	10·0	0·5	3·1 E. 4·35 p.m.
Sums or Means.	29·752	November 25th. 30·083 8 a.m.		November 21st. 29·282 5 a.m.		87	47	16	36	63	16	28	15	23	34	78	71	63	32	35	63	8087	11·2	0·7	

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups record the velocity, from which the pressure in lbs. per square foot is obtained by the Formula $P = V^2 \times .005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of NOVEMBER, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., November, 1874.									For 24h. previous to 9 a.m.				
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Wind.		Clouds 0-10.	Temperature in Shade.				Rain.				Evaporation in inches.
						Direction.	Force 0-6		Mean. Max.	Mean. Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Da e	
Thargomindah	640	450	30·068	81·8	39·0	E.N.E.	...	...	94·5	69·1	106·3	61·0	0·150	1	0·150	16	15·180
Tenterfield	80	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Grafton	22	...	...	72·0	...	S.E.	0·8	4·9	93·7	50·3	107·5	35·5	2·200	7	0·780	17	5·103
Inverell	122	...	...	69·5	62·0	E.	1·0	3·1	82·2	56·7	91·0	45·0	1·090	5	0·600	15	...
Bourke	393	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Narrabri	196	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Armidale	80	3278	...	58·7	83·0	W.	1·3	2·6	76·4	40·9	83·0	33·0	2·496	10	0·840	18	3·221
Goonoo Goonoo	110	1550	30·009	70·4	43·0	W.	0·5	0·9	88·4	52·5	100·0	40·0	0·320	2	0·200	28	...
Port Macquarie	0	53	30·115	69·2	...	S.	1·5	3·7	77·2	61·2	91·9	54·7	3·185	7	0·760	25	7·017
Murrurundi	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	68·6	...	S.	0·7	0·9	83·7	53·5	95·0	40·0	1·360	6	0·430	13	3·673
Scone	78	...	...	69·6	...	S.	2·2	3·4	81·6	57·6	101·5	48·0	0·790	4	0·490	24	...
Muswellbrook	68	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dubbo	182	...	...	64·6	...	N.	1·2	1·3	82·8	46·3	94·5	37·0	0·740	2	0·500	17	2·259
Mudgee	121	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Lambton	7	...	...	64·6	...	E.	1·2	...	78·0	51·1	101·0	45·0	5·480	10	3·050	25	6·792
Newcastle	1	112	29·929	66·7	67·0	S.S.W.	0·3	3·0	75·1	58·2	102·0	46·0	4·460	8	2·880	25	...
Orange	124	2891	...	62·1	...	S.	1·2	2·9	69·9	54·2	78·0	43·8	2·120	7	0·580	*	5·261
Bathurst	96	2200	29·930	63·2	54·0	W.	1·4	3·9	81·9	44·5	89·0	33·0	0·890	3	0·650	25	...
Forbes	176	...	30·120	67·4	...	N.W.	0·3	2·6	75·9	58·8	89·0	48·0	...	...	...	...	...
Kurrajong	36	1870	...	63·8	...	E.S.E.	1·3	4·8	77·9	49·6	83·5	41·5	1·820	5	0·850	24	...
Mount Victoria	61	3490	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Woodford	50	2192	29·861	63·3	...	W.	0·0	...	70·5	56·0	81·6	47·0	2·850	7	1·800	25	...
Parramatta	16	...	...	73·8	...	N.W.	0·3	0·7	88·8	58·8	98·2	56·1	4·420	4	2·060	25	...
South Reef	0	...	...	...	...	N.E.	1·3	4·2	...	...	....	...	5·270	6	1·800	25	...
Sydney	5	155	29·957	67·5	65·2	N.E.	0·7	6·3	76·1	58·7	93·8	52·0	3·330	8	1·715	25	7·541
Liverpool	16	...	29·943	65·1	...	W.	0·3	4·3	77·2	52·9	92·0	43·0	3·278	7	1·310	25	...
Wentworth	476	...	...	70·0	...	W.	2·2	4·8	82·5	57·4	103·2	45·0	0·490	3	0·340	14	11·001
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	1·940	5	0·950	16	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	2·570	8	1·390	25	...
Young	140	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wollongong	0	...	...	66·0	...	S.	0·0	1·5	75·1	56·9	87·5	50·0	...	...	...	...	...
Moss Vale	31	...	...	64·3	...	W.	1·7	...	73·0	55·5	89·0	41·0	2·160	5	0·670	26	...
Goulburn	54	2129	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	66·3	...	N.E.	0·4	...	81·7	50·8	95·0	35·0	0·150	1	0·150	15	8·435
Cape St. George	0	175	29·938	64·7	74·0	N.	1·9	6·2	72·6	56·7	88·0	48·0	0·950	3	0·580	25	...
Queanbeyan	60	...	...	68·5	...	N.W.	1·5	3·6	85·5	51·4	94·0	40·0	0·210	2	0·150	16	3·110
Urana	218	...	...	68·9	...	S.S.W.	2·1	4·0	81·7	56·0	98·0	45·0	...	...	...	...	11·840
Deniliquin	287	410	29·997	67·1	40·0	S.W.	2·3	3·6	83·0	51·1	100·80	42·0	0·050	1	0·050	14	...
Kiandra	88	4640	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Albury	175	572	29·985	62·8	85·0	W.	0·9	4·8	79·6	45·9	97·0	35·2	0·100	2	0·050	†	...
Cooma	52	2637	...	57·6	...	W.	1·3	4·8	72·9	42·2	90·0	31·5	1·000	3	0·400	17	3·589
Eden	0	107	29·904	62·7	68·0	S.W.	1·8	5·6	71·4	53·9	83·0	49·0	1·370	13	0·370	28	...

* 15th and 25th. † 14th and 21st.

Arranged in order of latitude, with distance from the coast, and height above the sea where it is known. Only 16 of the stations have barometers.

REMARKS.

REMARKS.

Thargomindah—Rain, 16th; hot wind, 2nd, 3rd, 4th, 5th, 6th, 8th, 12th, 13th, 21st, 22nd, 23rd, and 26th; thunderstorms, 1st, 15th, 16th, 24th; lightning, 3rd, 10th, 12th, 13th, 17th; hurricane, 13th.

Grafton—Rain, 4th, 17th, 18th, 23rd, 24th, 25th, and 27th; thunderstorms, 4th, 17th, 23rd.

Inverell—Rain, 15th, 18th, 24th, 25th, and 28th; lightning, 15th.

Armidale—Rain, 4th, 6th, 16th, 18th, 24th, 25th, 26th, 27th, 28th, and 30th; hot wind, 22nd.

Goonoo Goonoo—Rain, 16th and 28th; hot wind, 22nd; thunderstorm, 27th.

Port Macquarie—Rain, 15th, 17th, 18th, 24th, 25th, 26th, and 28th; thunderstorms, 3rd, 14th, 17th. and 27th; lightning, 5th, 17th, and 28th; hot wind, 2nd and 22nd; squally, 25th.

Cassilis—Rain, 9th, 13th, 16th, 17th, 24th, and 28th; frost, 29th and 30th; thunderstorms, 12th, 27th, and three distinct storms on 16th; lightning, 2nd, 3rd, 4th, 13th.

Scone—Rain, 8th, 14th, 24th, and 27th; thunderstorms, 14th and 27th; hot winds, 5th, 21st, and 22nd.

Dubbo—Rain, 17th and 24th; thunderstorms, 14th and 18th.

Lambton—Rain, 11th, 15th, 17th, 18th, 19th, 23rd, 24th, 25th, 26th, and 28th; thunderstorms, 15th, 17th, 19th, and 24th; lightning, 3rd, 5th, 15th, 17th, 18th, 19th, 24th, and 26th.

Newcastle—Rain, 11th, 15th, 17th, 23rd, 24th, 25th, 26th, and 28th; stormy on 25th.

Orange—Rain, 9th, 15th, 17th, 18th, 23rd, 25th, and 28th; thunderstorms, 14th, 16th, and 27th; lightning, 1st, 2nd, 3rd, 4th, and 22nd.

Bathurst—Rain, 17th, 24th, and 25th; thunderstorms, 16th and 27th; lightning, 14th, 16th, and 27th.

Forbes—Rained lightly, 24th.

Kurrajong—Rain, 14th, 16th, 24th, 25th, and 27th; thunderstorms, 14th, 16th, and 27th; lightning, 14th; hot wind and squally, 21st; boisterous, 22nd.

Woodford—Rain, 15th, 17th, 18th, 24th, 25th, 26th, and 28th; thunderstorms, 14th, 16th, and 17th; strong W. gale, 22nd.

Parramatta—Rain, 20th, 22nd, 25th, and 26th; heavy thunderstorm, 28th.

South Reef—Rain, 11th, 15th, 17th, 25th, 26th, and 28th; thunderstorms, 14th and 27th; hail storm, 27th; hot winds, 2nd, 3rd, 5th, 21st, and 22nd.

Sydney—Rain, 11th, 12th, 15th, 17th, 24th, 25th, 26th, and 28th; dew, 28th; thunderstorms, 14th and 27th; hail, 27th; lightning, 3rd, 14th, 16th, and 27th; hot winds, 2nd, 3rd, 21st, and 22nd; lunar ring, 17th; gale, 20th; meteor observed on 18th.

Liverpool—Rain, 11th, 15th, 17th, 18th, 24th, 25th, and 28th; thunderstorms, 14th and 17th; lightning, 16th and 27th; hot wind, 21st and 22nd; S. squall, 8th.

Wentworth—Rain, 14th, 24th, and 27th; thunderstorms, 14th and 27th; north-west gale, 5th; hurricane, 14th; hot wind, 13th; squall, 17th.

Wilton—Rain, 16th, 17th, 24th, 27th, and 30th; thunderstorms, 16th, 17th, and 27th.

Cordeaux River—Rain, 11th, 15th, 17th, 18th, 24th, 25th, 26th, and 28th; thunderstorms, 14th, 17th, and 27th.

Wollongong—Rained, 10th and 17th.

Moss Vale—Rain, 11th, 15th, 17th, 18th, and 26th; hot winds, 2nd, 22nd, and 23rd; thunderstorms, 14th, 16th, and 17th; tremendous hailstorm from S.-W. on 17th.

Wagga Wagga—Rain, 15th.

Cape St. George—Rain, 17th, 25th, and 28th; dew, 12th and 18th; thunderstorms. 14th and 27th; lightning, 3rd, 6th, and 29th; gales, 8th, 9th, 14th, and 21st.

Queanbeyan—Rain, 16th and 28th.

Urana—Large meteor N., at 11 p.m., on 7th; stormy, 9th; lightning, 13th.

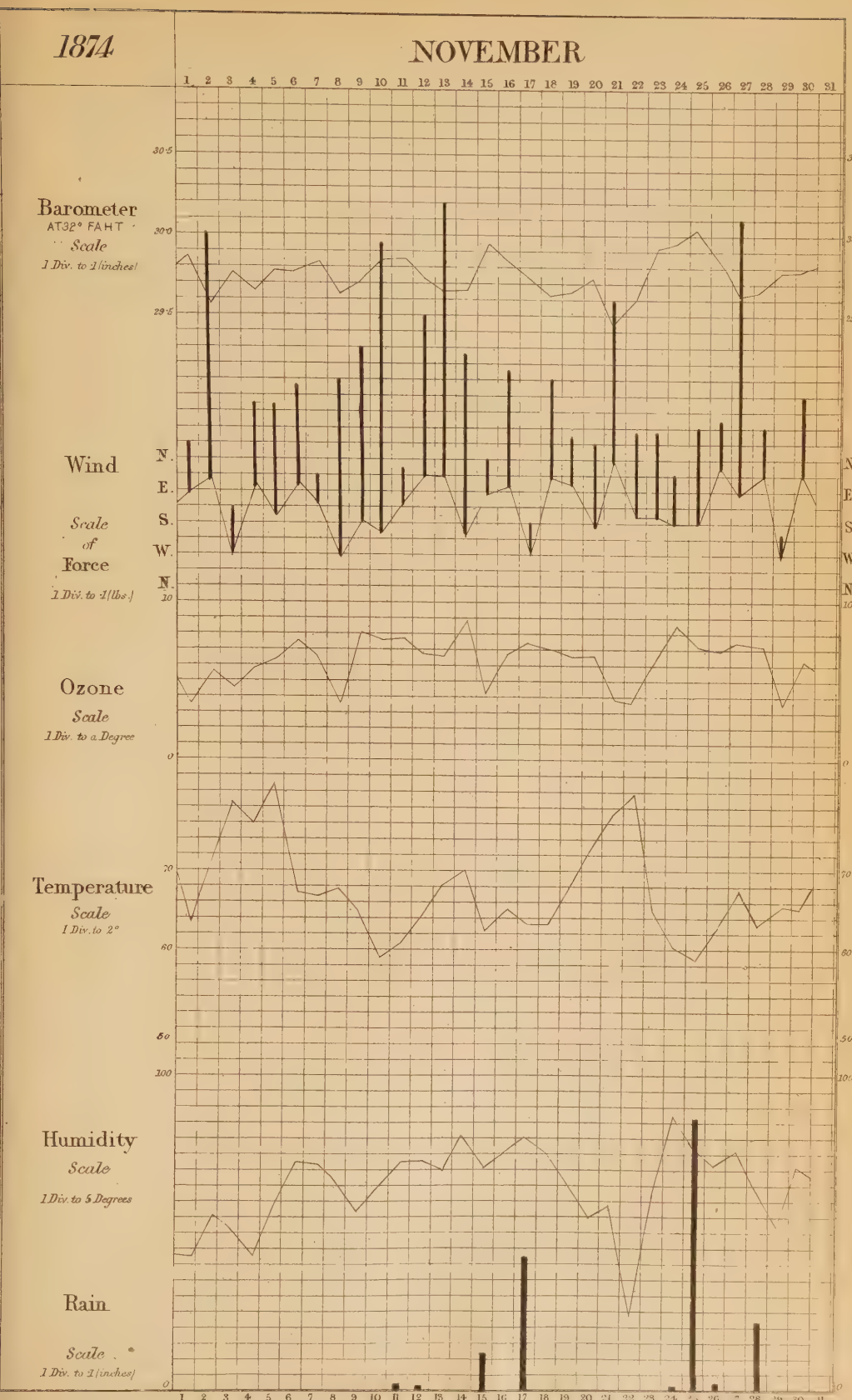
Deniliquin—Rain, 14th; thunder, 13th; stormy, 5th, 10th, 19th, 21st; gale, 27th.

Albury—Rain, 14th and 21st.

Cooma—Rain, 17th, 18th, and 25th.

Eden—Rain, 1st, 7th, 9th, 10th, 15th, 18th, 19th, 21st, 22nd, 25th, 27th, 28th, and 29th; thunder squalls, 3rd, 13th, 14th, and 27th; thunder, 8th and 16th; lightning, 21st; gale on 8th.

METEOROLOGICAL CURVES



Lithographed at the Surveyor Generals Office Sydney.

METEOROLOGICAL OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORY, SYDNEY,

AND AN

ABSTRACT FROM THE COUNTRY STATIONS

FOR THE

MONTH OF DECEMBER, 1874,

WITH APPENDIX;

UNDER THE DIRECTION OF

H. C. RUSSELL, B.A., F.R.A.S.,
GOVERNMENT ASTRONOMER FOR NEW SOUTH WALES.

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METEOROLOGICAL OBSERVATIONS.

GOVERNMENT OBSERVATORY, SYDNEY.

LATITUDE 33° 51′ 41″ LONGITUDE 10h 4m 46s.
Magnetic Variation 9° 32′ 22″ East.

DECEMBER, 1874.

GENERAL ABSTRACT.

BAROMETER .. At 32° Faht.	Highest Reading	30·024 inches on the 3rd & 26th at 8 a.m.	
	Lowest Reading	29·217	„ on the 23rd, at 2 p.m.
	Mean Height	29·720	

(Being 0·041 inch less than that in the same month on an average of the preceding 15 years.)

WIND	Greatest Pressure... ...	26·6 lbs. on the 23rd.	
	Mean Pressure	0·6 lb.	
	Number of Days Calm ...	0	
	Prevailing Direction ...	E.N.E.	

(Prevailing direction during the same month for the preceding 15 years N.E.)

TEMPERATURE	Highest in the Shade ...	96·3	... On the 23rd.
	Lowest in the Shade ...	56·7	... On the 25th.
	Greatest Range	28·4	... On the 23rd.
	Highest in the Sun ...	131·6	... On the 22nd.
	Highest in Black Box with Glass Top	210·2	... On the 11th.
	Lowest on the Grass ...	46·1	... On the 25th.
	Mean Diurnal Range ...	16·0	
	Mean in the Shade ...	70·9	

(Being 1·7 greater than that of the same month on an average of the preceding 15 years.)

HUMIDITY ...	Greatest Amount	94·0	... On the 18th and 19th.
	Least	21·0	... On the 23rd.
	Mean	62·3	

(Being 8·7 less than that of the same month on an average of the preceding 15 years.)

RAIN	Number of Days	5 rain and 1 dew.	
	Greatest Fall	0·544 inch.	On the 11th.
	Total Fall	0·655 inch.	65 feet above ground.
		0·952 inches.	15 inches above ground.

(Being 1·478 inch less than that of the same month on an average of the preceding 15 years.)

EVAPORATION	Total Amount	9·571 inches.
OZONE	Mean Amount	5·3

(Being 0·9 greater than that in the same month on an average of the preceding 14 years.)

ELECTRICITY ...	Number of Days Lightning	3
CLOUDY SKY ...	Mean Amount	5·3
	Number of Clear Days ...	4
METEORS ...	Number Observed ...	1

REMARKS.

The weather in Sydney during December has been hot and dry, the rainfall being under an inch Thunderstorms occurred, 10th and 29th; dense fog, 9th; S. gales, 18th and 25th; and oppressive hot wind, 23rd.

The Country Stations report similar hot and dry weather, particularly Narrabri. And at only eight of the Stations did the rainfall exceed one inch.

SYDNEY, DECEMBER, 1874.

Date.	Moon's Phases.	Standard Barometer at 9 a.m., corrected to Mean Sea Level & 32° Fah.	Wind.		Temperature.									Humidity. 0-100.	Rain.	Cl'dy Sky. 0-10.
					Dry.	Wet.	Shade.				Sun.	Grass.	Sea. Water.			
			Prevailing Direction.	Total Velocity. Miles.	Mean 9.3.9.	Mean 9.3.9.	Max.	Min.	Range	Mean.	Max.	Min.	9 a.m.	Mean 9.3.9.	Inches.	Taken at 9, 3, & 9.
1	Last Qr.	29·950	S.	342	68·2	61·9	75·1	64·9	10·2	70·0	112·4	57·4	66·3	67·7	·0	5·3
2		30·161	S.S.E.	122	67·5	59·7	72·2	59·7	12·5	66·0	117·1	54·2	66·8	61·0	·0	7·0
3	In Equat.	·153	E.	187	69·1	62·4	74·0	60·6	13·4	67·3	117·1	54·7	66·9	65·7	0·007	9·3
4		·190	N.N.E.	279	68·1	61·2	74·1	63·2	10·9	68·7	124·6	57·6	66·6	65·0	0·017	10·0
5		·017	E.N.E.	275	72·4	65·3	77·1	61·1	16·0	69·1	116·6	51·1	66·9	65·7	·0	6·3
6		29·911	S.	164	74·0	67·6	81·2	63·8	17·4	72·5	121·4	55·0	66·7	68·0	·0	10·0
7		·860	E.	237	76·1	69·7	80·9	64·1	16·8	72·5	120·4	54·6	67·2	70·0	·0	2·7
8		·954	E.N.E.	257	75·5	69·9	82·1	66·1	16·0	74·1	120·6	62·1	67·5	72·3	·0	0·0
9	New Moon.	·827	N.E.	303	81·7	71·2	92·0	67·6	24·4	79·8	124·6	61·2	67·9	56·7	·0	1·0
10	G. S. Dec.	·671	S.S.W.	214	77·1	70·4	94·5	72·2	22·3	83·4	127·3	63·1	67·8	70·3	·0	7·7
11		·642	S.W.	451	72·7	63·3	83·1	65·7	17·4	74·4	124·9	61·6	67·1	60·3	0·544	3·0
12		·995	S.	318	64·6	55·7	68·8	57·6	11·2	63·2	113·6	51·1	67·6	56·0	·0	9·0
13		30·015	W.S.W.	205	68·0	57·5	73·7	59·1	14·6	66·4	116·2	53·1	68·1	51·0	·0	8·0
14		29·925	S.	320	65·6	58·9	72·6	60·8	11·8	66·7	116·4	52·3	68·4	65·0	·0	8·7
15		·964	S.W.	126	66·2	58·3	72·5	60·2	12·3	66·4	116·9	54·6	68·3	60·3	·0	3·7
16	First Qr.	·942	E.N.E.	214	69·7	62·9	74·0	59·0	15·0	67·5	114·3	48·4	68·1	65·7	·0	1·0
17	In Equat.	·931	E.N.E.	312	69·7	64·6	75·5	66·2	9·3	70·9	115·6	60·1	68·6	73·7	·0	6·7
18		·775	S.	352	71·2	67·6	82·0	67·3	14·7	74·7	120·6	62·4	68·9	81·3	·0	9·0
19		30·028	E.N.E.	137	69·3	60·7	77·2	62·7	14·5	70·0	123·0	57·8	68·9	59·3	0·001	4·0
20		29·804	E.	140	76·4	62·4	83·1	59·4	23·7	71·3	125·1	51·4	68·5	43·0	·0	0·0
21		·891	E.N.E.		71·2	66·2	79·7	62·9	16·8	71·3	115·6	53·8	68·7	74·0	·0	4·7
22		·778	N.N.E.	198	77·2	67·7	91·6	64·0	27·6	77·8	131·6	55·1	68·5	58·0	0·001	4·7
23	G.N.Dec. Full Moon	·441	S.	448	79·7	62·2	96·3	67·9	28·4	82·1	115·3	60·1	68·9	42·0	·0	9·3
24		·795	E.N.E.	141	66·9	56·5	76·2	56·8	19·4	66·5	122·6	48·0	68·7	52·0	·0	6·0
25		·925	N.E.	124	71·9	57·5	79·6	56·7	22·9	68·2	120·7	46·1	68·1	40·0	·0	0·0
26		30·128	E.	280	73·2	65·8	78·1	60·7	11·4	69·4	115·5	51·8	68·4	64·3	·0	3·3
27		·187	N.E.	296	75·0	63·6	78·0	63·8	14·2	70·9	117·6	54·3	68·3	50·0	·0	0·0
28		·167	E.N.E.	243	74·2	65·3	79·7	63·6	16·1	71·7	120·5	53·1	68·5	59·7	·0	1·0
29		29·943	S.	429	73·7	66·2	79·1	62·9	16·2	71·0	117·1	52·1	68·7	67·0	·0	3·3
30	In Equat.	·886	S.	249	66·3	61·4	70·3	61·4	8·9	65·9	107·4	57·6	68·3	73·0	0·382	10·0
31	Last Qr.	·704	S.	294	67·9	63·0	72·5	64·0	8·5	68·3	111·6	59·0	68·5	73·7	·0	10·0
Sums or Means	.....	29 921	E.N.E.	7657	71·6	63·4	78·9	62·8	16·0	70·9	118·8	55·3	68·0	62·3	Sum. 0·952	5·3

Observations of Standard Barometer taken at 9 a.m., and corrected to 32° Fah. and Mean Sea Level.

The Barometer at 9 a.m. reads 0·027 above the true mean for the day.

Heavy dew on the 22nd.

SYDNEY, DECEMBER, 1874.

Date	Evaporation. Inches.	Ozone, 0–10. Day.	Night.	Mean.	Remarks.
1	0·329	5·0	6·0	5·5	1.—Cloudy and fine alternately; clouds very light in the forenoon. Very light rain at 11 25 p m.
2	0·219	3·5	4·5	4·0	2.—Fine after 8·45 p.m. Light clouds during forenoon, and very heavy clouds W. at 3 p.m.
3	0·250	4·0	7·0	5·5	3.—Cloudy; light rain at 12·20 a m., and from 8·34 p.m. until 8.36 p.m., and again at 9·40 p.m.; rain became heavier at 9·50 p.m., and lasted until about 10 p.m. Light clouds during forenoon.
4	0·259	6·5	6·0	6·3	4.—Cloudy; clouds were light until evening. Light shower from 8·40 a.m. until 8·43 a.m. Zodiacal light W. until after 8 30 p.m. Fresh breeze.
5	0·323	4·0	6·5	5·3	5.—Fine after 3·45 p.m. Very light clouds all forenoon. Calm at 9 p.m.
6	0·268	...	...	4·3	6.—Fine from about 7 p.m. until 9·45 p.m. Clouds were very light in the morning. Electrical clouds W.N.W. in morning.
7	0·328	6·0	7·5	6·8	7.—Fine until evening, then cloudy and fine alternately. Like thunderstorm S.W. at 3 p.m. Very warm.
8	0·322	4·0	6·5	5·3	8.—Cloudy until 8·50 a.m. Very warm. Calm at 9 a.m. Clouds on horizon W. at 9 p.m.
9	0·398	...	4·0	...	9.—Cloudy from about 6·30 p.m. until about 7·30 p.m. No clouds at 9 a.m. Dense fog all morning, and began to clear at 7 30 a.m. Very hot. Like thunderstorm W. at 3 p m.; also hazy.
10	0·242	5·0	6·5	5·8	10.—Cloudy after 10 a.m. Forenoon very hot. Calm at 9 a.m. and very hazy. Thunderstorm W. all afternoon and evening from 2·24 p.m. until about 7·30 p.m., and raining lightly from 3·52 p.m.; heavy rain at intervals. Lightning at 4·30 p.m.
11	0·411	6·0	6·5	6·3	11.—Cloudy until 9 a.m., and again from 10·15 a.m. until 2·20 p.m. Very strong dry breeze until evening. Lightning E. at 8·5 p.m. and during rest of evening. Very brilliant meteor seen at 10·33 p.m. from N. to S., with a comet-like tail; it lasted 5 seconds and burst.
12	0·315	4·5	7·0	5·8	12.—Fine at 11 a.m., cloudy again between 1 and 2 p.m. Cool. Evening dull, like rain.
13	0·298	...	...	3·0	13.—Fine from 1 p m. until about 6 p.m. Clouds broken all morning.
14	0·298	4·5	4·5	4·5	14.—Fine from 10·30 a.m. until after 2 p.m. Morning dull. Very cool in the evening.
15	0·236	3·0	6·0	4·5	15.—Cloudy and fine alternately. Evening almost calm.
16	0·322	5·5	5·0	5·3	16.—Cloudy from about 5·15 p.m. until 8 p.m. Warm. Evening hazy.
17	0·263	4·5	7·5	6·0	17.—Fine from 11 a m. until 8·15 p.m. Morning dull. Strong dry breeze.
18	0·262	7·0	9·0	8·0	18.—Cloudy. Very warm Atmosphere very thick and foggy looking at 3·40 p.m. Light thick rain at 7·25 p.m.; still raining at 9 p.m. S. gale all afternoon and evening.
19	0·246	5·0	7·0	6·0	19.—Fine after 1·15 p.m. Morning dull.
20	0·330	...	...	3·5	20.—Cloudy after 6 p.m., clouds light, but afterwards became heavy. Fresh breeze.
21	0·306	6·0	7·0	6·5	21.—Fine from 10·30 a.m. until about 8·55 p.m. No clouds during afternoon and evening. Strong breeze until about 9 p.m.
22	0·401	1·0	4·5	2·8	22.—Cloudy between 1 p.m. and 2 p.m. until after sunset; clouds very light. Strong breeze all afternoon and evening.
23	0·496	4·0	7·5	5·8	23.—Hot wind until 3 40 p.m., when S. gale began to blow; cloudy during day.
24	0·328	4·0	6·0	5·0	24.—Fine until about 10·45 a.m. Clouds in afternoon, very thin and filmy. Also very light during evening.
25	0·338	...	...	2·5	25.—Fine. No clouds in the morning, and foggy until about 7·40 a.m. Very smoky rest of day.
26	0·327	6·0	8·5	7·3	26.—Light clouds and cloudy all morning, also foggy looking. Thick smoke all over sky in afternoon and evening; hazy.
27	0·341	...	...	3·5	27.—Cloudy at 10·30 p.m. Warm during day. Very hazy in the morning.
28	0·374	5·0	6·5	5·8	28.—Fine. Fresh breeze. No clouds at 3 p.m. Some clouds on horizon W. at 9 p.m.
29	0·330	5·5	7·5	6·5	29.—Cloudy after 4 p.m. Evening dull. Thunderstorm N. 9·1 p.m. until 11 p.m. Lightning all round from 7·58 p.m., and began to rain at 8·16 p.m.
30	0·204	5·0	5·0	5·0	30.—Cloudy. Morning and evening dull. Strong cool breeze all forenoon.
31	0·207	4·5	6·5	5·5	31.—Cloudy. Morning and evening dull. Evening cool.
Means	Sum. 9·571	4·8	6·4	5·3	

Amount of Rain, Dew, and Evaporation recorded at 9 a.m., for the previous 24 hours.

Amount of Day and Night Ozone recorded at 9 p.m. and 9 a.m. respectively.

SYDNEY, DECEMBER, 1874.

Date.	Self-registering Barometer at 32°.					Self-registering Anemometer.																		
	Mean.	Max.	Hour.	Min.	Hour.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	Velocity. Total. Miles.	Velocity. Mean. pr. hr.	Mean Pressure. lbs.	Greatest Pressure. Direction of Wind. Time.		
1	29·885	29·978	8 a.m.	29·775	9 a.m.	14	5	2	...	...	...	...	...	1	...	...	...	...	...	2	342	14·2	1·0	9·2	S.	12·10 p.m.
2	29·963	29·991	8 & 9 p.m.	29·937	3 p.m.	...	3	...	...	...	...	...	...	...	...	...	...	...	...	8	13	122	5·1	0·1	0·7	S.E.	2·45 p.m.
3	29·977	30·024	8 a.m.	29·924	6 p.m.	...	...	...	...	...	...	...	...	...	...	...	5	10	3	1	5	187	7·8	0·3	1·4	E.	2·5 p.m.
4	29·914	30·018	9 a.m.	29·856	3 a.m.	...	...	...	...	...	...	...	...	...	9	6	4	4	...	1	...	279	11·6	0·6	2·2	E.N.E.	5·10 p.m.
5	29·715	29·842	9 a.m.	29·663	1 & 2 a.m.	...	2	...	...	...	...	...	...	...	...	6	14	1	1	...	...	275	11·4	0·6	5·4	N.E.	5·0 p.m.
6	29·689	29·737	9 a.m.	29 645	4 & 5 p.m.	7	5	3	...	...	...	...	...	...	...	...	2	5	1	...	1	164	6·8	0·2	1·6	E.	3·15 p.m.
7	29·700	29·778	8 a.m.	29·623	6 p.m.	4	5	...	...	...	...	...	...	...	...	...	4	6	1	1	3	237	9·8	0·5	3·1	S.	10·10 p.m.
8	29·673	29·782	9 a.m.	29·630	5 p.m.	...	...	1	...	...	...	...	...	...	...	...	16	2	1	4	...	257	10·7	0·6	3·6	N.E.	6·40 p.m.
9	29·549	29·656	9 a.m.	29·460	6 p.m.	6	1	1	...	...	...	...	...	...	...	8	3	1	3	1	...	303	12·6	0·8	6·8	N.E.	4·12 p.m.
10	29·524	29·623	7 p.m.	29·474	12 a.m.	2	6	1	1	1	...	1	2	4	1	...	...	...	1	1	3	214	8·9	0·4	3·6	S.	1·45 p.m.
11	29·580	29·792	8 a.m.	29·337	2 p.m.	...	4	9	7	2	...	...	...	...	...	...	...	2	...	...	..	451	18·8	1·8	14·6	W.S.W.	4·25 p.m.
12	29·847	29·902	11 p.m.	29·817	10 & 12 am & 2 pm	12	6	2	4	...	...	...	...	...	...	...	...	...	...	...	...	318	13·2	1·0	3·1	S.S.W.	11·45 a.m.
13	29·775	29·838	9 a.m.	29·734	4 a.m.	4	3	4	6	...	...	...	...	...	...	...	...	...	1	2	4	205	8·5	0·3	3·1	S.S.E.	2·35 p.m.
14	29·741	29·774	6 & 8 a.m.	29·694	2 p.m.	9	6	2	2	...	...	...	...	...	...	...	...	...	...	...	5	320	13·3	0·9	2·0	S.S.E.	4·45 p.m.
15	29·750	29·788	9 a.m.	29·703	4 p.m.	1	3	10	...	...	...	...	...	...	...	...	...	...	...	2	8	126	5·2	0·1	1·1	S.E.	2·50 p.m.
16	29·732	29·769	9 a.m.	29·670	4 p.m.	...	...	...	...	...	...	...	...	...	...	...	14	9	1	...	...	214	8·9	0·4	2·6	E.	3·15 p.m.
17	29·657	29·758	9 a.m.	29·588	3 a.m.	...	...	...	...	...	1	...	...	1	1	5	16	...	...	...	...	312	13·0	0·8	6·1	E.N.E.	3·40 p.m.
18	29·732	29·864	7 & 8 a.m.	29·584	11a.m & 1 p.m.	15	...	...	...	...	...	...	...	...	1	...	4	2	...	2	352	14·7	1·1	14·6	S.	6·0 p.m.
19	29·693	29·852	9 a.m.	29·607	3 a.m.	1	...	...	...	1	2	2	1	2	1	1	7	4	...	1	1	137	5·7	0·2	1·3	E.N.E.	6·5 p.m.
20	29·655	29·718	7 a.m.	29·573	4 p.m.	...	...	...	...	2	1	...	...	...	3	...	5	8	5	...	...	140	5·8	0·2	1·8	S.E.	12·25 p.m.
21	29·655	29·713	9 a.m.	29·565	4, 5, & 6 p.m.	...	...	...	...	...	3	1	1	3	4	3	9	...	...	...	...	...	...	...	6·8	E.N.E.	2·35 p.m.
22	29·452	29·609	9 a.m.	29·276	8 a.m.	...	...	...	...	...	3	...	...	3	8	5	5	...	...	...	...	198	8·2	0·3	3·1	N.E.	7·25 p.m.
23	29·434	29·607	7 & 8 a.m.	29·217	2 p.m.	9	...	1	5	2	3	2	2	...	...	...	...	...	...	...	...	448	18·7	1·7	26·6	W.N.W.	2·15 p.m.
24	29·653	29·730	7 & 8 a.m.	29·590	10a.m. & 1 & 5 p.m.	...	...	1	6	1	1	...	1	2	...	...	7	1	1	2	1	141	5·9	0·2	2·0	W.S.W.	12·55 p.m.
25	29·739	29·914	6 a.m.	29·724	3 p.m.	. .	...	3	...	...	...	...	...	2	1	7	6	4	1	...	...	124	5·2	0·1	1·6	E.	4·45 p.m.
26	29·965	30·024	8 a.m.	29·899	4 p.m.	...	...	...	...	...	...	...	...	1	...	...	7	13	3	...	...	280	11·7	0·7	5·1	E	8·40 p.m.
27	29·962	30·016	9 a.m.	29·923	5 p.m.	...	...	...	...	...	..	...	...	...	...	15	9	...	...	...	...	296	12·3	0·8	6·5	E.N.E.	3·55 p.m.
28	29·889	29·993	9 a.m.	29·812	8 a.m.	...	...	...	...	...	...	...	1	2	6	7	8	...	...	...	...	243	10·1	0·5	3·6	E.N.E.	12·25 p.m.
29	29·696	29·795	10 p.m.	29·603	5 p.m.	9	1	1	...	...	...	1	...	...	2	5	5	...	...	...	...	429	17·9	1·6	6·5	N.E.	4·40 p.m.
30	29·603	29·708	9 a.m.	29·519	4 a.m.	11	5	5	...	...	...	...	...	...	...	...	...	...	...	...	3	249	10·4	0·5	4·5	S.	9·55 a.m.
31	29·501	29·537	9 p.m.	29·465	4 & 8 a.m.	14	3	1	6	...	...	...	...	...	...	...	...	...	...	...	...	294	12·2	0·7	4·2	S.	1·45 p.m.
Sums or Means.	29·720	3rd & 26th Dec. 30·024	8 a.m.	23rd December, 29·217	2 p.m.	118	58	47	37	9	14	7	8	21	36	69	146	74	25	24	51	7657	10·6	0·6			

The self-registering Barometer is worked by electricity, and the Anemometer, mechanical. A set of Robinson's Cups records the velocity from which the pressure in lbs. per square foot is obtained by the Formula $P = v^2 \times \cdot 005$. The direction of the wind is taken at every hour from the Anemometer.

ABSTRACT FROM METEOROLOGICAL STATIONS,

For the Month of December, 1874.

Stations.	Least Distance from East Coast in miles.	Height above sea in feet.	Mean of Observations taken at 9 a.m., December, 1874.										For 24h. previous to 9 a.m.				
						Wind.			Temperature in Shade.				Rain.				Evaporation in inches.
			Barometer.	Temperature in Shade.	Humidity 0 to 100.	Direction	Force. 0-6.	Clouds. 0-10.	Mean Max.	Mean Min.	Extreme Max.	Extreme Min.	Total Fall, inches.	No. of Days	Greatest Fall, inches.	Date	
Thargomindah	640	450	30·020	82·5	40·0	E.N.E.	...	...	93·7	71·3	104·5	60·7	0·740	2	0·620	4	15·999
Tenterfield	80	...	...	67·7	...	N.E.	1·3	4·2	80·9	54·4	90·0	50·0	0·650	2	0·550	16	...
Grafton	22	...	...	71·6	...	S.	0·9	4·7	93·7	49·4	102·0	45·0	2·550	7	0·860	12	4·405
Inverell	122	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Bourke	393	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Narrabri	196	...	...	81·6	...	W.	1·3	0·5	99·2	64·0	112·6	49·1	0·310	1	0·310	16	10·373
Armidale	80	3278	...	...	90·0	W.	1·6	2·5	...	...	...	...	2·530	5	1·200	19	6·120
Goonoo Goonoo	110	1550	...	73·6	...	N.W.	0·4	0·4	91·3	55·8	100 0	40·0	1·200	2	0·070	20	...
Port Macquarie	0	53	29·952	70·2	...	S. & N.E. equal.	1·4	3·2	77·9	62·4	82·0	55·0	1·270	5	0·530	19	7·035
Murrurundi	94	1545	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Cassilis	120	...	...	74·0	...	N.	0·5	0·5	90·7	57·3	104·0	43·0	0·180	3	0·013	11	6·842
Scone	78	...	...	76·8	...	W.	1·9	2·7	90·3	63·3	101·0	52·0	...	...	...	...	5·730
Muswellbrook	68	...	...	79·1	...	S.E.	1·7	2·6	98 6	59·6	107·5	46·5	...	...	...	...	...
Dubbo	182	...	...	71·1	...	E.	0·8	...	90·1	52·1	103·0	40·0	...	...	...	...	...
Mudgee	121	...	...	78·0	...	.....	...	...	88·7	67·2	99·4	51·0	...	...	...	...	3·452
Dalwood	27	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
West Maitland	18	...	...	68·0	...	N.E.	1·4	4·1	83·5	52·5	101·0	41·5	1·020	2	0·920	30	7·717
Lambton	7	...	...	63·4	...	E.	1·3	...	75·3	51·5	101·0	44·0	0·940	2	0·740	30	7·292
Newcastle	1	112	29·899	67·5	68·0	N.W.	0·3	3·2	74 2	60·7	100·0	42·0	0 180	3	0·110	30	...
Orange	124	2891	...	68·3	...	S.W.	1·5	...	78·5	58 1	94·0	47·8	0·370	3	0·210	9	5·838
Bathurst	96	2200	29·894	69 3	49·0	W.	1·2	2·3	89·5	49·0	100·5	41·0	0·170	3	0·060	*	...
Forbes	176	...	30·081	73·9	...	N.W.	0·5	1·2	85·4	62·3	98·0	50·0	..	...	...	...	...
Kurrajong	36	1870	...	63·5	...	N.E.	1·7	4·9	73·4	53·5	92·0	42·5	1·180	5	0·520	29	...
Mount Victoria	61	3490	29·909	66·8	56·0	W.	0·0	4·5	82·7	50·8	99·5	39·0	0·420	4	0·200	11	5·909
Woodford	50	2192	29·860	68·3	...	W.	0·0	...	75·4	61·2	91·8	54·0	0·300	3	0·150	11	...
Parramatta	16	...	...	...	...	N.E.	...	0·3	...	...	91·3	56·1	0·580	1	0·580	11	...
South Reef	0	...	...	...	...	N.E.	1·1	4·5	...	...	...	...	1·260	2	0·810	11	...
Sydney	5	155	29·921	70·9	62 3	E.N.E.	0·6	5·3	78·9	62·8	96·3	56·7	0·952	5	0·544	11	9·571
Liverpool	16	...	29·909	69·6	...	.....	...	2·8	81·2	58·0	99·0	46·0	0·761	3	0 400	30	...
Wentworth	476	...	...	78·2	...	S.W.	2·1	3 6	92·8	63·5	112·5	52·2	0·080	1	0·080	18	...
Wilton	13	...	...	...	...	.....	...	...	...	...	...	...	0 300	3	0·200	29	...
Cordeaux River	6	...	...	...	...	.....	...	...	...	...	...	...	0·400	4	0·260	30	...
Young	140	...	...	70·0	...	N.E.	...	...	82·4	57·5	103 0	43·0	...	...	...	...	...
Wollongong	0	...	...	70·0	...	N.E.	0.5	...	81·2	58·8	94·0	50·0	...	...	...	...	...
Moss Vale	31	...	...	68·2	...	W.	1·3	...	81·8	54·6	99·0	45·0	0·440	2	0·420	30	...
Goulburn	54	2129	29·908	69·5	61·0	W.	0·0	3·5	86·7	52·2	104·4	33·4	0·260	2	0·180	30	8·096
Terara	4	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	161	...	...	...	...	N.E.	0·2	...	...	60·3	...	48·0	...	...	...	...	11·875
Cape St. George	0	175	29·915	68·9	69·0	N.	1·5	4·6	77·0	60·7	92·0	52·0	0·210	3	0·150	30	...
Queanbeyan	60	...	...	72·2	...	N.W.	0·9	2·5	88·3	56·1	97·0	41·0	0·120	1	0·120	30	4·918
Urana	218	...	...	74·4	...	N.N.E.	1·7	1·2	85·7	60·3	110·0	51·0	...	...	...	...	16·984
Deniliquin	287	410	29·947	76·4	52·0	S.W.	1·4	1·4	96·6	56·2	118·0	40·0	0·140	3	0·100	18	...
Kiandra	88	4640	...	...	60·0	N.W.	2·5	3·3	72·7	31·4	90·0	18 0	1·300	3	1·000	19	...
Albury	175	572	29·950	71·6	62·0	E.	1·0	2·8	91·3	51·9	106·5	38·5	0·060	2	0·030	†	...
Cooma	52	2637	...	65·7	...	W.	1·3	4·2	83 5	47·9	99·0	30·0	0·190	2	0·170	1	5 333
Eden	0	107	29 896	65·3	71·0	N.E.	1·5	3·2	72.9	57·7	81·0	51·0	1·670	10	0·600	1	...

* 11th and 31st. † 18th and 23rd.

Arranged in order of latitude, with distance from the coast and height above the sea where it is known. Only 16 of the stations have barometers.

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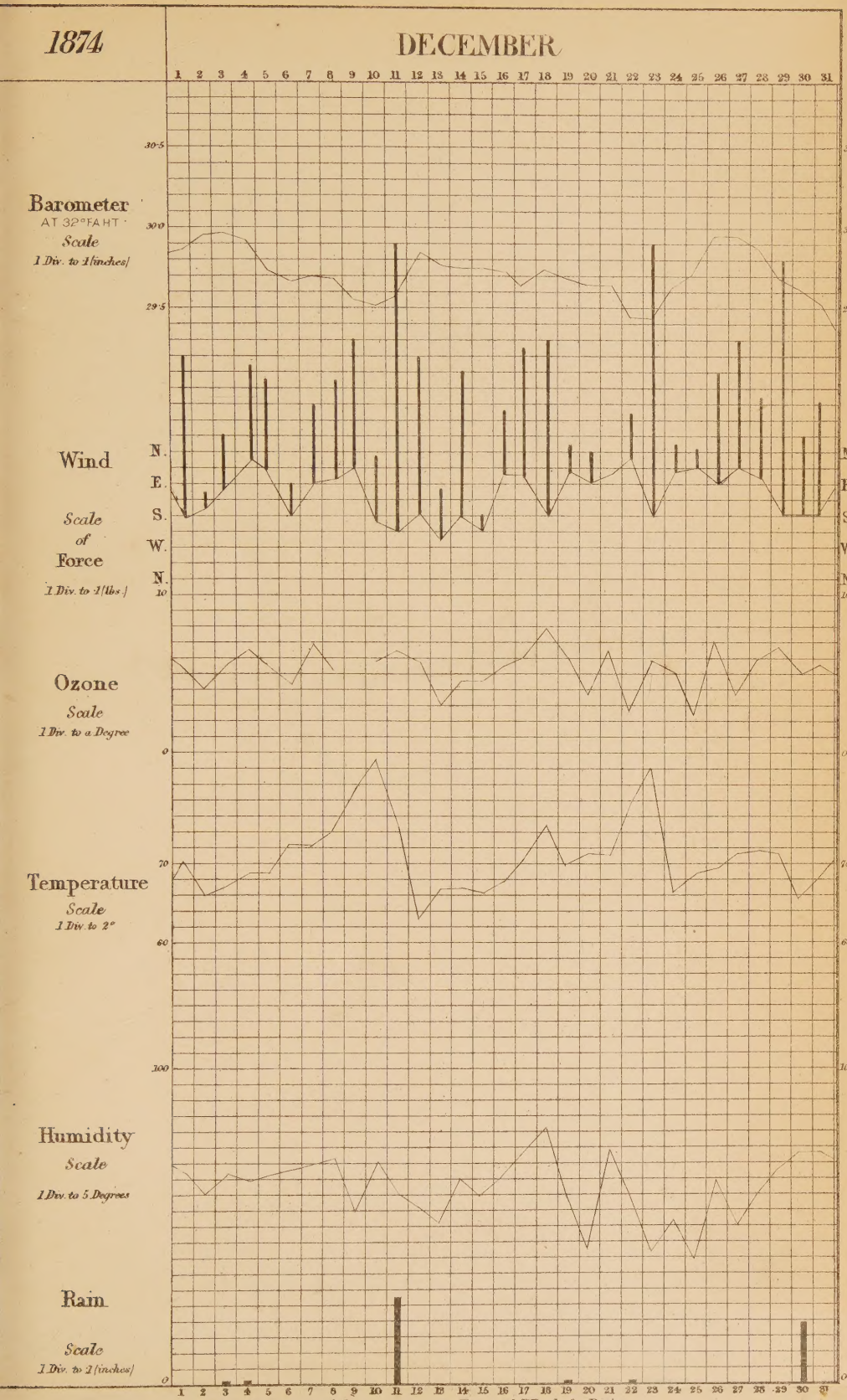
REMARKS.

REMARKS.

Thargomindah—Rain, 4th and 5th; distant thunder, 1st, 9th, and 19th; and heavy thunder on 15th; lightning, 1st, 9th, 15th, 19th, and 27th; squally, 26th.
Tenterfield—Rain, 3rd and 16th.
Grafton—Rain, 12th, 16th, 19th, 20th, 22nd, 24th, and 29th; thunderstorms during night on 19th, 20th, 22nd, and 28th, and one on the evening of 31st.
Narrabri—Rain, 16th. Weather during month exceedingly dry.
Armidale—Rain, 3rd, 16th, 17th, 18th, and 19th; hot wind, 9th; slight frost, 10th, with day very warm.
Goonoo Goonoo—Rain, 19th and 20th; thunder, 18th and 19th.
Port Macquarie—Rain, 3rd, 12th, 19th, 24th, and 31st; thunderstorms, 11th, 18th, 19th, and 23rd; lightning, 11th and 29th; hazy, 9th, 10th, 13th, 14th, 17th, 24th, 25th, 26th, 27th, and 30th.
Cassilis—Rain, 11th, 20th, and 30th; thunderstorms, 7th and 29th; lightning vividly, 8th and 10th; lightning also 15th, 16th, and 29th; gale, 29th.
Scone—These results are only from 1st to 21st inclusive, excepting evaporation which is from 1st to 18th.
Muswellbrook—Strong wind on the 1st; hot during month, and no rain fell.
Dubbo—Light shower on the 30th, and stormy.
West Maitland—Rain, 19th and 30th; storm, in evening, 18th.
Lambton—Rain, 30th and 31st; thunderstorm, 17th; lightning, 17th and 31st; bursters, 10th and 30th.
Newcastle—Rain, 19th, 30th, and 31st; heavy sea, 13th, 14th, and 15th.
Orange—Rain, 9th, 18th, and 30th; heavy thunderstorm, 30th; lightning, 6th, 7th, 8th, 9th, and 11th; hazy, 28th.
Bathurst—Rain, 7th, 11th, and 31st; thunderstorms, 6th and 10th; lightning, 16th and 29th; heavy gale, 29th.
Forbes—Light rain on 10th.
Kurrajong—Rain, 16th, 19th, 29th, 30th, and 31st; thunderstorm, 29th.
Mount Victoria—Rain, 11th, 17th, 19th, and 30th; thunderstorms, 6th, 7th, 10th, 16th, and 29th; foggy, 2nd, 14th, 15th, and 30th.
Woodford—Rain, 11th, 16th, and 19th; hot wind, 23rd.
Parramatta—Rain, 11th; heavy storm on 11th.
South Reef—Rain, 11th and 30th; thunderstorms, 10th and 29th; lightning, 29th; gales, 11th, 18th, 23rd, and 24th; hot wind, 23rd; hazy, 18th, 22nd, and 23rd.
Sydney—Rain, 3rd, 4th, 11th, 19th, and 30th; dew on 22nd; thunderstorms, 10th and 29th; lightning, 10th, 11th, and 29th; dense fog, 9th, and foggy looking, 18th, 25th, and 26th; zodiacal light, 4th; brilliant meteor, 11th; southerly gales, 18th and 23rd; hot wind, 23rd.
Liverpool—Rain, 4th, 11th, and 30th; thunderstorms, 10th, 16th, and 29th; lightning, 16th and 29th; hazy, 1st, 5th, 7th, 8th, and 9th.
Wentworth—Rain, 18th; thunderstorm, 9th; lightning, 9th and 18th; squally, 9th and 23rd; hot wind, 17th.
Wilton—Rain, 10th, 16th, and 29th; thunderstorm, 29th.
Cordeaux River—Rain, 2nd, 4th, 11th, and 30th; thunderstorms, 6th, 10th, and 30th; hot wind, 10th; foggy, 6th; hazy, 18th; gale, 20th
Young—Fine, and very warm during month, and no rain.
Wollongong—Hazy, 8th; foggy, 22nd.
Moss Vale—Rain, 7th and 30th; thunderstorms, 6th, 7th, 16th, and 22nd; hot wind, 9th.
Goulburn—Rain, 11th and 30th; thunderstorm, 29th, with lightning; slight shock of earthquake at 6 a.m. the 14th, apparently from S.E. to N.W.
Cape St. George—Rain, 8th, 14th, and 30th; thunderstorms, 23rd and 29th; lightning, 1st, 6th, 7th, 9th, and 29th; foggy, 7th and 25th; hazy, 6th, 8th, 18th, 21st, 25th, and 27th.
Queanbeyan—Rain on the 30th; hazy, 29th; very hot during month.
Urana—Lightning, 18th; hazy, 7th, 8th, 9th, and 27th; gale, 18th.
Deniliquin—Rain, 10th, 18th, and 23rd; gale, 6th and 11th.
Kiandra—Rain, 19th, 21st, and 26th; thunderstorm, 9th, 14th, and 15th; lightning, 9th and 14th.
Albury—Rain, 18th and 23rd; gale from N.W. on 8th, and intensely hot; gale also from W. on the 19th; hazy, 28th.
Cooma—Rain, 1st and 12th; hazy, 26th and 28th.
Eden—Rain, 1st, 2nd, 4th, 10th, 11th, 12th, 13th, 24th, 27th, and 30th; thunder squalls, 19th and 22nd; squalls, 29th; lightning, 6th, 7th, and 8th; fog, 27th, 28th, and 29th.

METEOROLOGICAL CURVES



The dark vertical lines represent Force of Wind & Rain.

Lithographed at the Surveyor Generals Office, Sydney.

Dew fell Dec^{r} 22nd